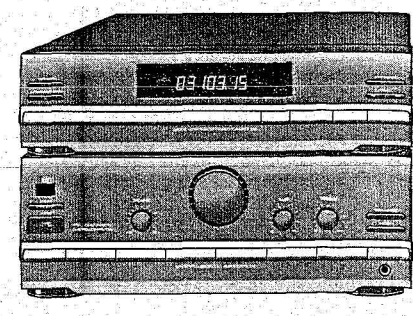
Digital Receiver 70FR360

/00U/02U/05U

Service
Service
Service



ServiceManual

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Specification

General:

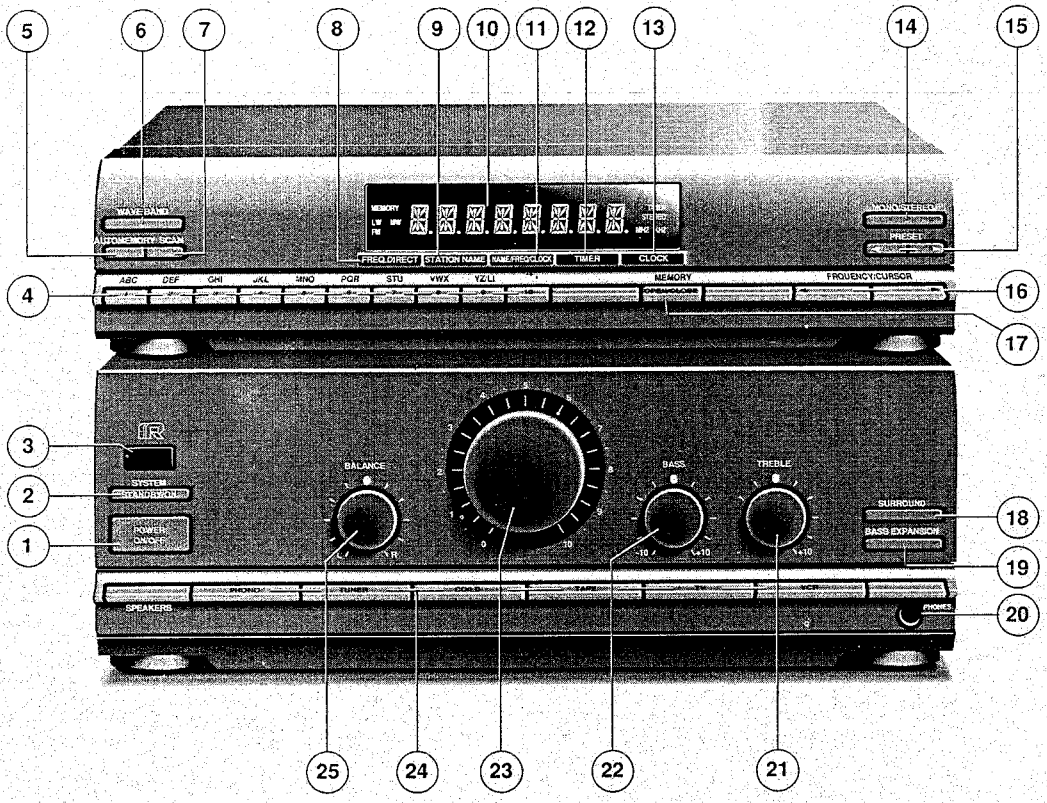
Mains voltage	:	220V / 50Hz for /00, /02, /08
	:	240V / 50Hz for /05, /10
	:	230V / 50Hz for /01
	:	120V / 60Hz for /17
Battery	:	3xR6 (only for clock)
Power consumption	:	≤ 300W at 2x42W output power
	:	≤ 30W in stand by
Supply out (for FC320)	:	+14V stab.
	:	+12V unstab.
	:	4,1V AC on -20V for FTD
	:	-25V for FTD

Tuner:	FM	MW	LW
Tuning range	87,5 - 108 MHz	522 - 1611 kHz (not for /17) 530 - 1700 kHz (only for /17)	148 - 284 kHz
Aerial input	75 Ω (not for /17) 300 Ω (only for /17)	Frame aerial (pos 430)	Frame aerial (pos 430)
IF	10,7 MHz ± 25 kHz	450 kHz ± 1 kHz	450 kHz ± 1 kHz
Sensitivity	4 µV (2 µV typ.)	3 mV/m (2 mV/m typ.)	6 mV/m (not guaranteed above 250 kHz)
Image rejection ratio	30 dB (40 dB typ.)	27 dB (30 dB typ.)	40 dB (43 dB typ.)
-3 dB limiting point	5 µV (2 µV typ.)		

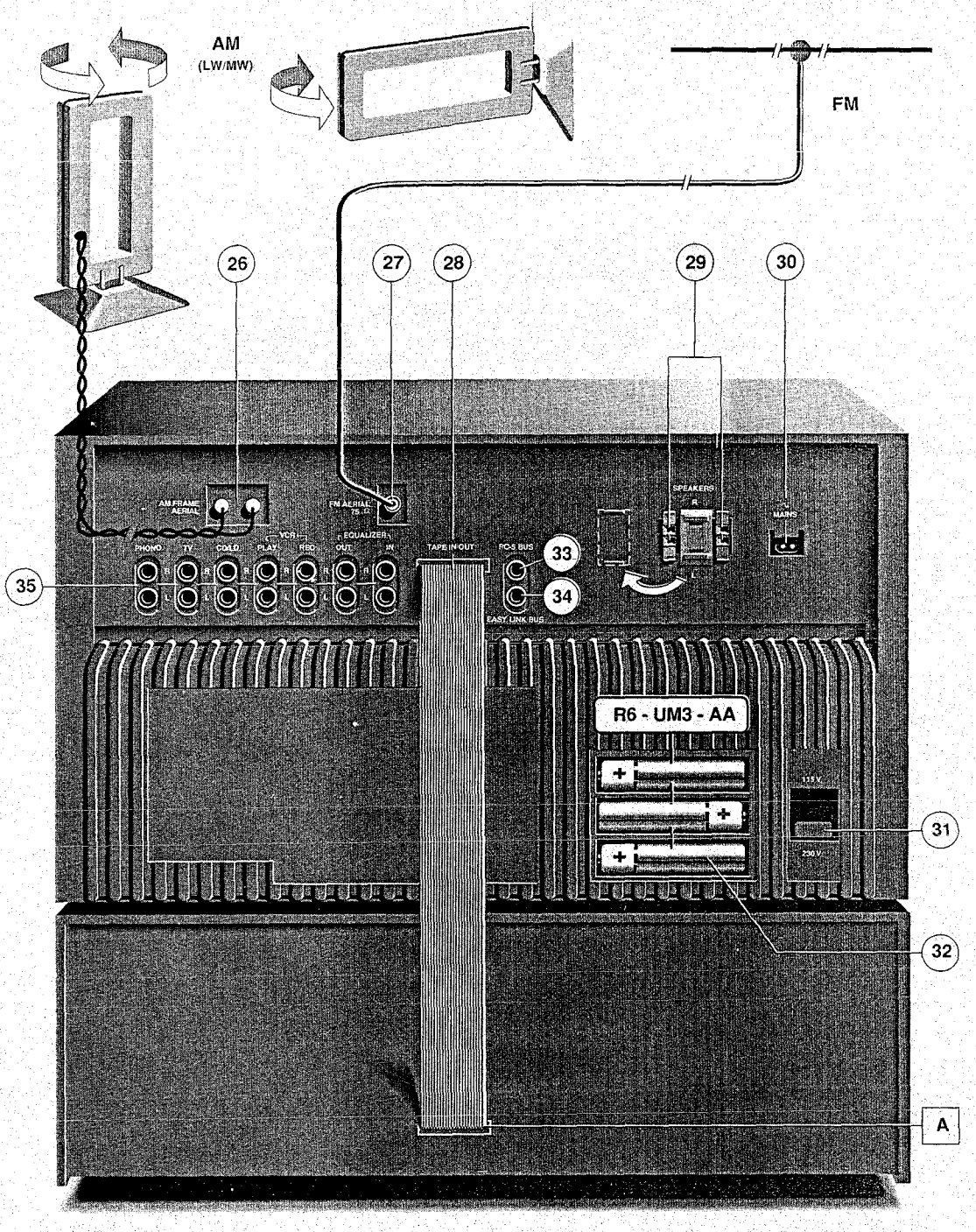
Amplifier:

Output power	:	2 x 42W at 8Ω D=0,7% (from 63 Hz to 12,5 kHz)
	:	2 x 35W at 8Ω D=0,09% (measured at 1 kHz)
Headphone	:	6,3mm stereo jack 3V into 1kΩ 350mV into 8Ω
Power stage protection	:	AC no
	:	DC yes
	:	Temperature no
	:	Shortcircuit yes
Frequency response	:	20 Hz - 20 kHz ± 2 dB
Tone control	:	Bass from +10 dB to -10 dB ± 2 dB at 80 Hz
	:	Treble from +10 dB to -10 dB ± 2 dB at 10 kHz
Bass expansion	:	+8dB ±2dB at 125 Hz
Input sensitivity	:	CD 350 mV
	:	TV 200 mV
	:	PHONO 2,5 mV
	:	TAPE 580 mV
	:	Equal. 250 mV
	:	VCR 250 mV
Output voltage	:	TAPE 250 mV
	:	Equal. 250 mV
	:	Rec out 250 mV
	:	VCR 250 mV

Connections & Controls



1)	Power ON/OFF	1271	17)	Memory OPEN/CLOSE	1467
2)	Stand by	1463	18)	Surround	1501
3)	IR-eye	6441	19)	Bass expansion (DBB)	1502
4)	Tuner Preset Buttons	1472 - 1481	20)	Headphone	1400
5)	Auto Memory	1462	21)	Treble	3512
6)	Wave band	1464	22)	Bass	3511
7)	Auto scan	1466	23)	Volume pot	3526
8)	Frequency direct	1482		Indicator LED	6001
9)	Station name	1484	24)	Source selector PHONO	1419
10)	FTD	1451		TUNER	1415
11)	Name/Frequency/Clock	1470		CD	1416
12)	Timer	1483		TAPE	1417
13)	Clock	1485		TV	1418
14)	Mono/Stereo	1469		VCR	1414
15)	Preset UP/DOWN	1468/1471	25)	Balance pot	3525
16)	Frequ. UP/DOWN	1461/1465			



26) AM frame aerial 1102
27) FM aerial 75Ω 1101
28) Tape IN/OUT 1554
29) Speaker terminal 1272
30) Mains socket 1273
31) Voltage selector (not in all versions)
33) RC5 1561
34) Easy link 1561

35) PHONO 1551
TV 1551
CD/LD 1552
VCR IN 1552
VCR OUT 1553
EQUALIZER IN/OUT 1553
A) Connection to CCD310

DISMANTLING OF POWER BOARD

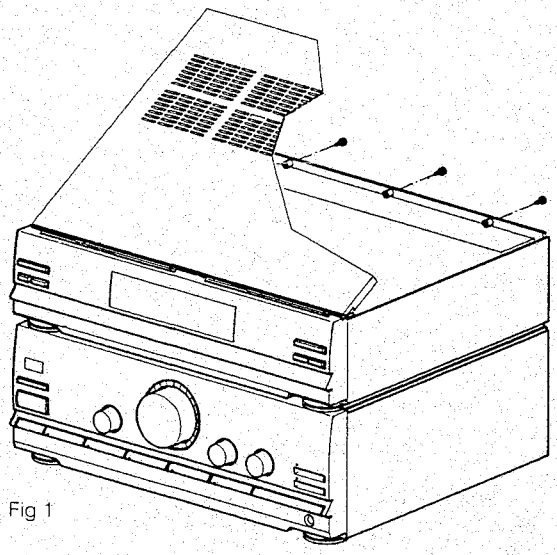


Fig 1

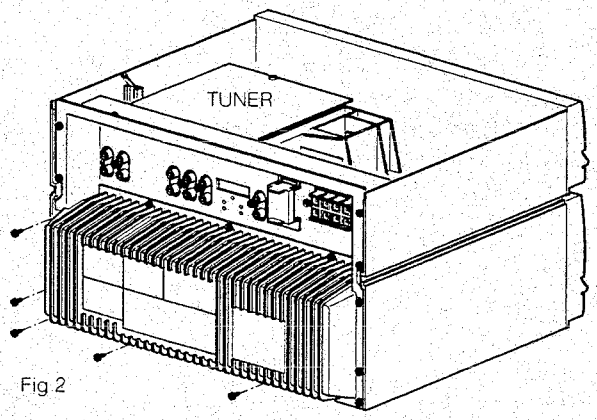


Fig 2

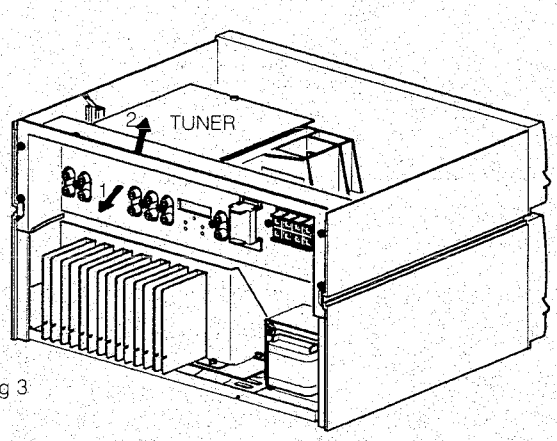


Fig 3

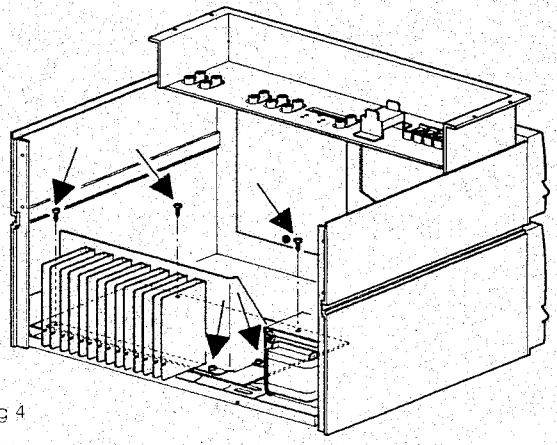


Fig 4

1) Loosen 3x Torx 10 screws (see figure 1).
2) Remove top (see figure 1).
3) Loosen 9x Torx 10 screws and 6x Torx M4x10 on rear part (see figure 2).
4) Remove Power lever (pos 417). Only snapped on power switch.
5) Bring the upper rear part in an upright position (see figure 3).
6) Loosen 5 screws (3x Torx M4x10, 2x Torx 10).

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DISMANTLING OF TUNER PANEL

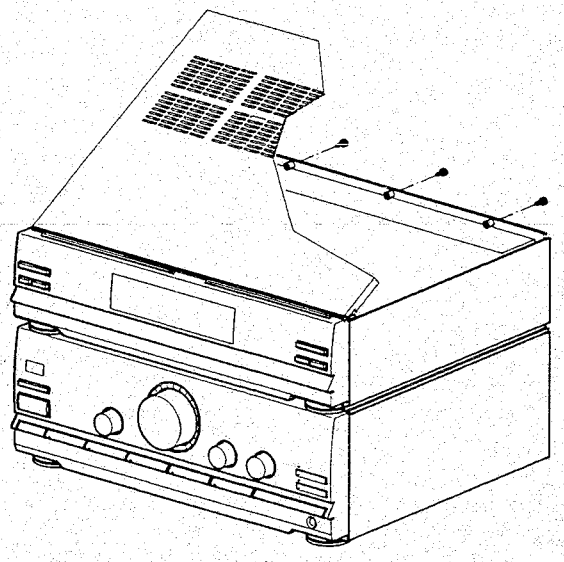

Fig.1

1) Loosen 3x Torx 10 screws (see figure 1).
2) Remove top (see figure 1).
3) Loosen 4x Torx 10 screws on aerial terminals (see figure 2).
4) Loosen 1x Torx 10 on printed circuit board (see figure 3).
5) Bend the hidden snaps (shown in fig. 2) with a small screw driver sidewards while pulling the PCB as shown in figure 3.

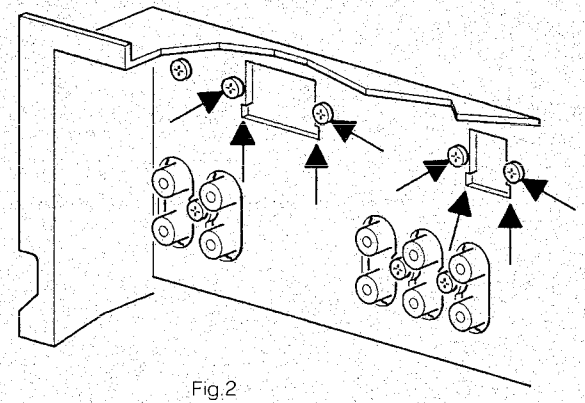

Fig.2

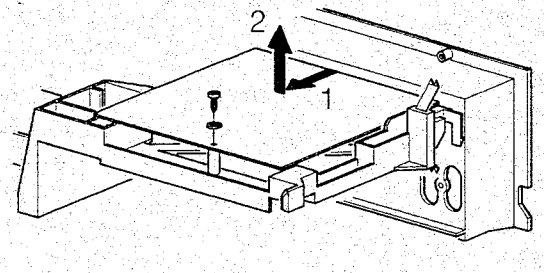

Fig.3

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DISMANTLING OF OUTPUT PANEL

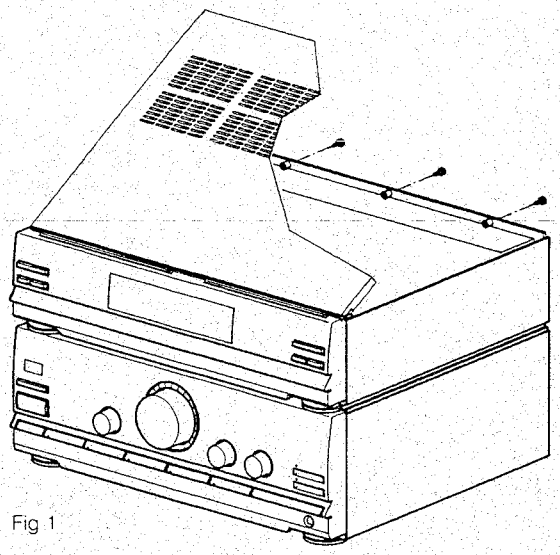

Fig 1

1) Loosen 3x Torx 10 screws (see figure 1).
2) Remove top (see figure 1).
3) Remove Power lever (pos 417). Only snapped on power switch.
4) Remove 3x Torx 10 (see figure 2).
5) Remove PCB as shown in figure 3.

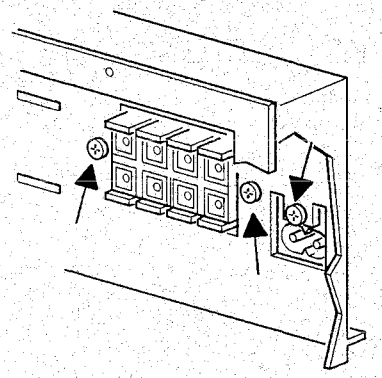

Fig 2

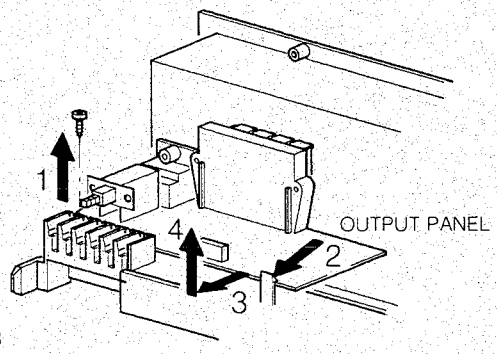

Fig 3

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DISMANTLING OF SOURCE SELECTOR

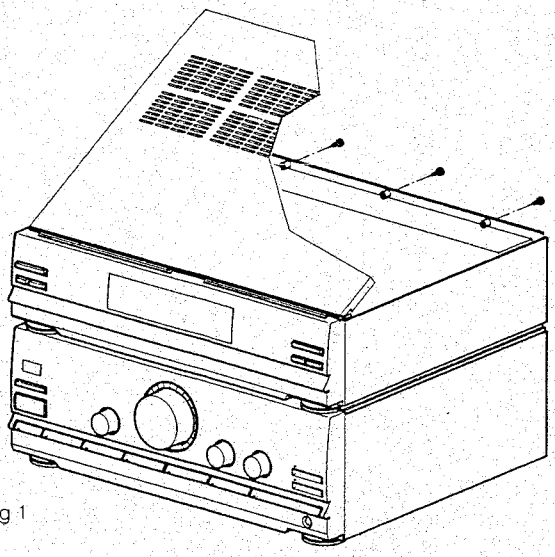

Fig 1

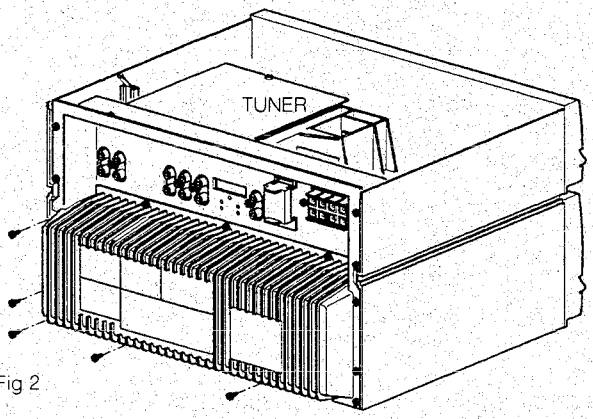

Fig 2

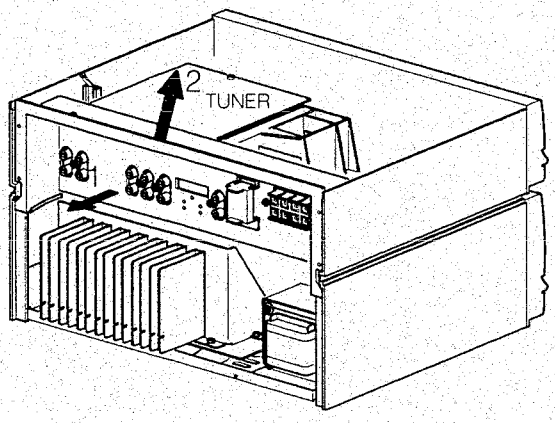

Fig 3

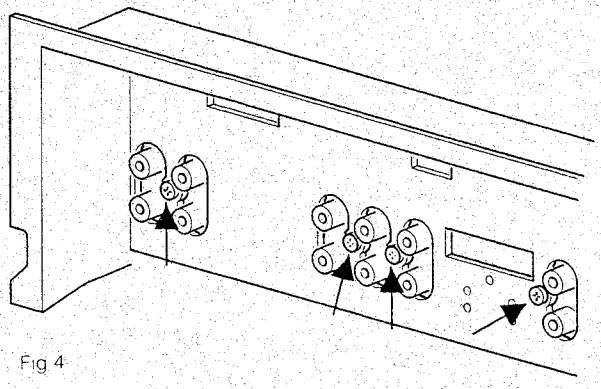

Fig 4

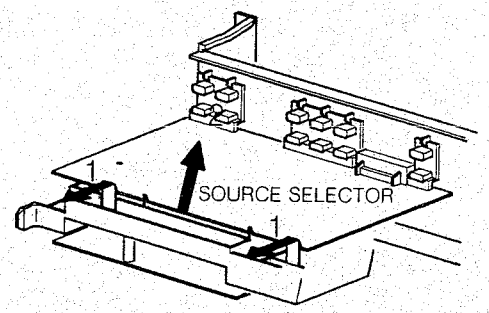

Fig 5

1) Loosen 3x Torx 10 screws (see figure 1).
2) Remove top (see figure 1).
3) Loosen 9x Torx 10 screws and 6x Torx M4x10 on rear part (see figure 2).
4) Remove Power lever (pos 417). Only snapped on power switch.
5) Bring the upper rear part in an upright position (see figure 3).
6) Loosen 5x Torx 10 screws (see figure 4). Remove equalizer bridges.
7) Loosen two snaps (see figure 5) and remove PCB.

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ACCESS TO FRONT PANELS

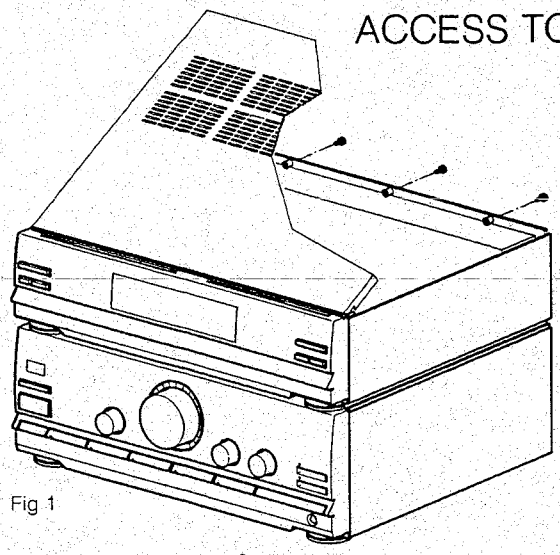


Fig 1

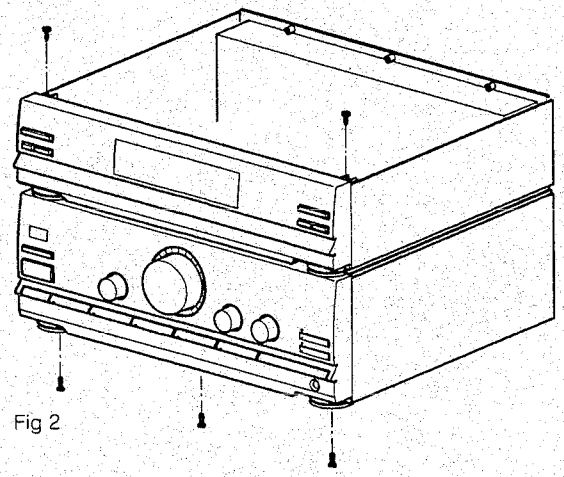


Fig 2

1) Loosen 3x Torx 10 screws (see figure 1).
2) Remove top (see figure 1).
3) Loosen 2x Torx 10 - front/side panels (see figure 2).
4) Loosen 3x Torx M4x10 on bottom (see figure 2).
5) Loosen two snaps on side panels (see figure 3).

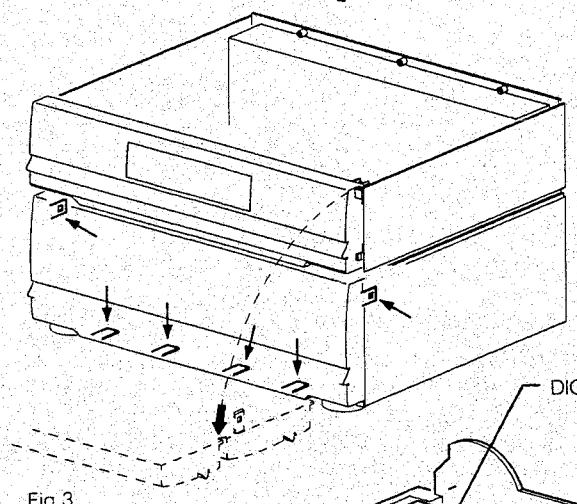
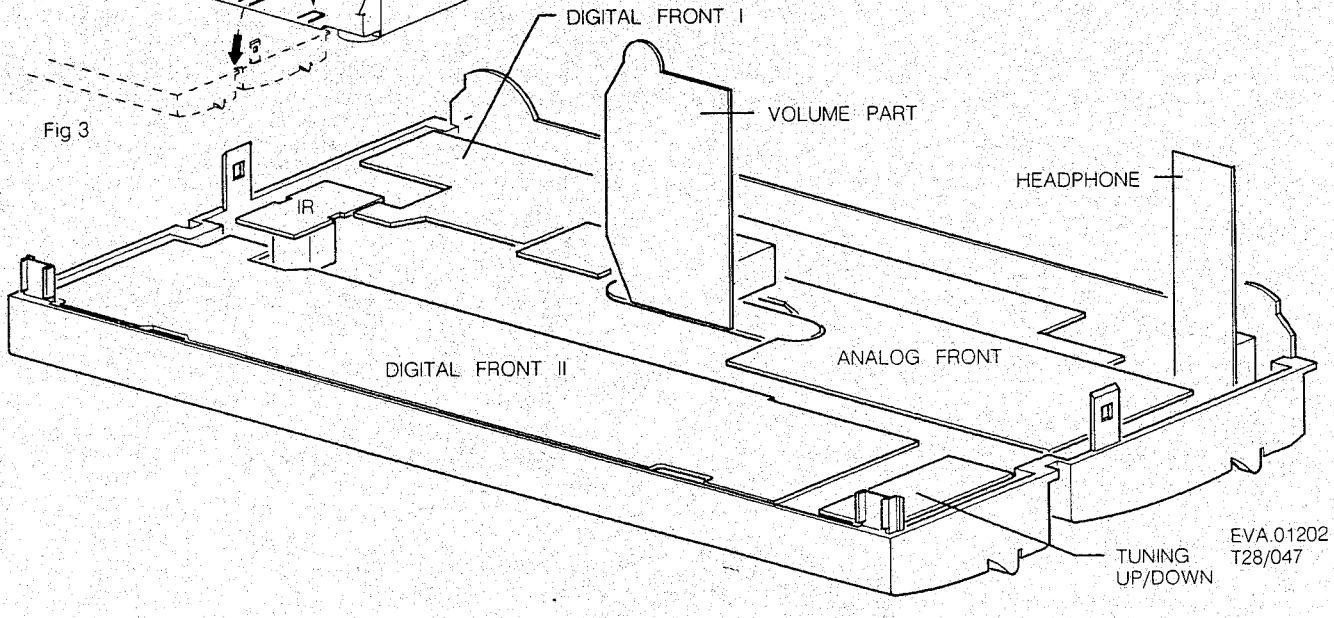
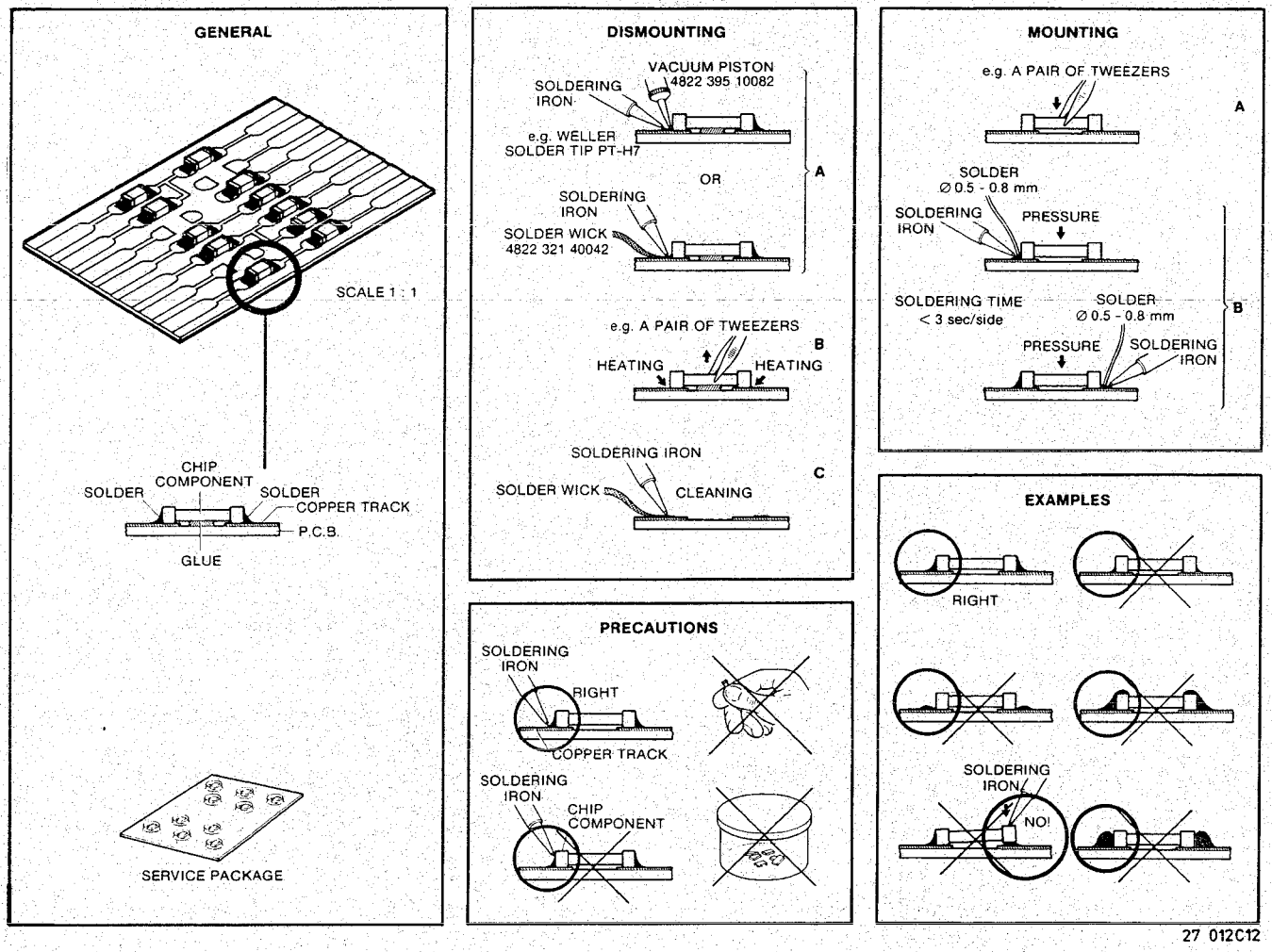


Fig 3





27 012C12

GB WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD).
Careless handling during repair can reduce life drastically.
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance.
Keep components and tools also at this potential.

ESD

NL WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD).
Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen.
Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat.
Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

F ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD).
Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation.
Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité.
Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

D WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegen elektrostatische Entladungen (ESD).
Unsorgfältige Behandlung bei der Reparatur kann die Lebensdauer drastisch vermindern.
Sorgen sie dafür, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand mit dem Massepotential des Gerätes verbunden sind.
halten Sie Bauteile und Hilfsmittel ebenfalls auf diesem Potential.

I AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD).
La loro longevità potrebbe essere fortemente ridatta in caso di non osservazione della più grande cauzione alla loro manipolazione.
Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza.
Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

GB

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified be used.

D

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden; für Reparaturen sind Original-Ersatzteile zu verwenden.

NL

Veiligheidsbepalingen vereisen, dat het apparaat in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

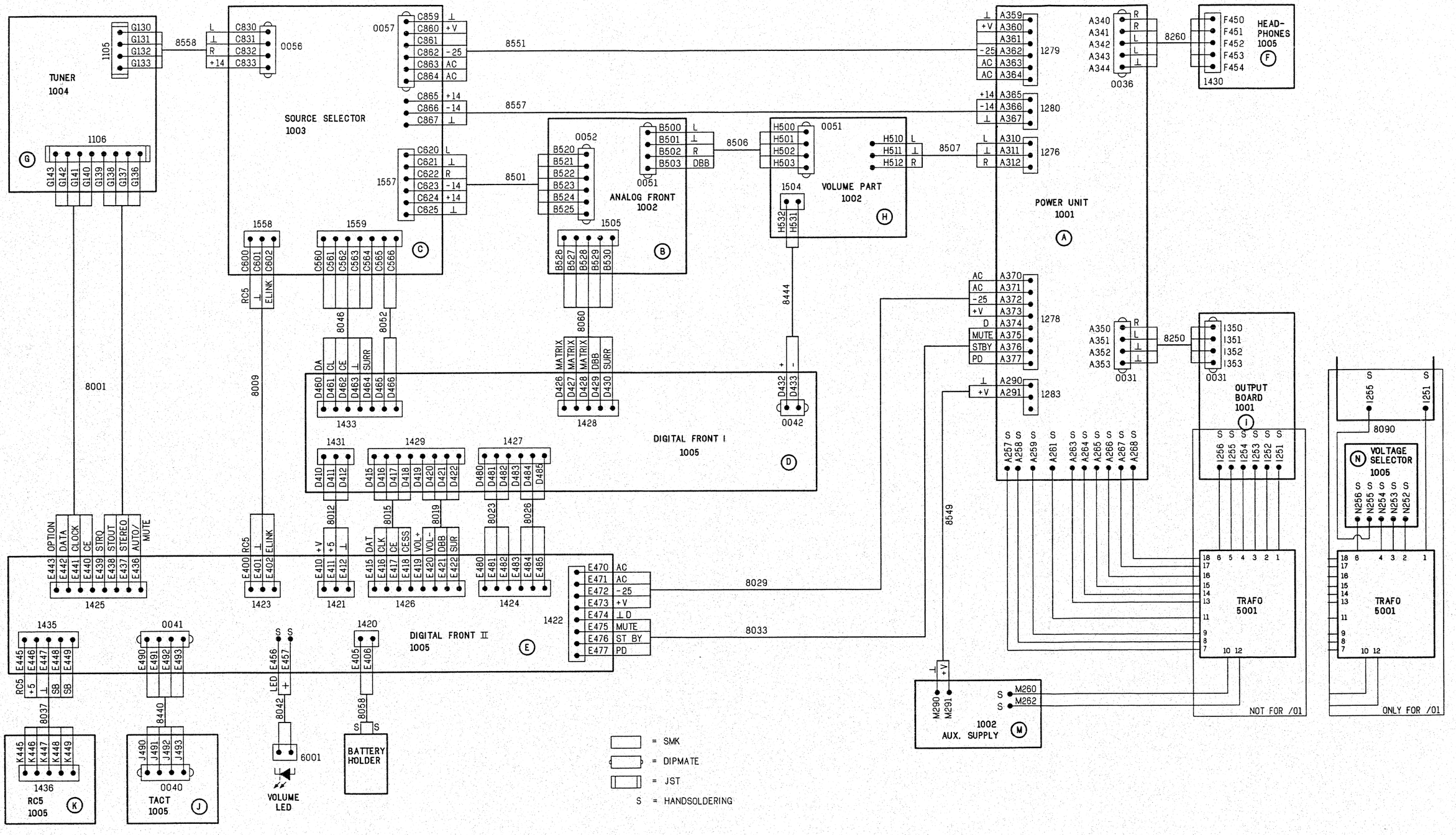
I

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambiago identici a quelli specificati.

F

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

Wiring diagram of set



0031	B4	2250	D1	2270	E8	2292	C2	2321	A1	3257	C1	3277	F3	3295	F2	3313	C2	3340	E4	3370	B1	6257	F2	6282	F7	6314	E7	7259	F3	7281	C2	9265	F2	9299	C5	9334	D9
0031	E8	2251	D1	2271	F2	2293	C3	2322	F7	3258	C1	3278	E5	3296	F3	3314	C4	3341	F1	3371	E2	6258	F5	6283	B6	6315	G8	7260	G5	7284	F7	9267	C3	9302	D6	9336	E9
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1253	B5	2259	E1	2277	F3	2309	C6	2329	G7	3286	C1	3284	E5	3302	F3	3329	F1	3353	D1	3386	F8	6264	C1	6296	B2	6336	F7	7266	F8	7289	E7	9278	F3	9314	C7	9345	E9
1259	A7	2260	D3	2278	E8	2310	C9	2330	B8	3287	E1	3285	F2	3303	E1	3330	E7	3354	C1	3388	G7	6299	E1	6300	F4	6339	G8	7267	E3	7294	G7	9283	C3	9315	E8	9348	D10
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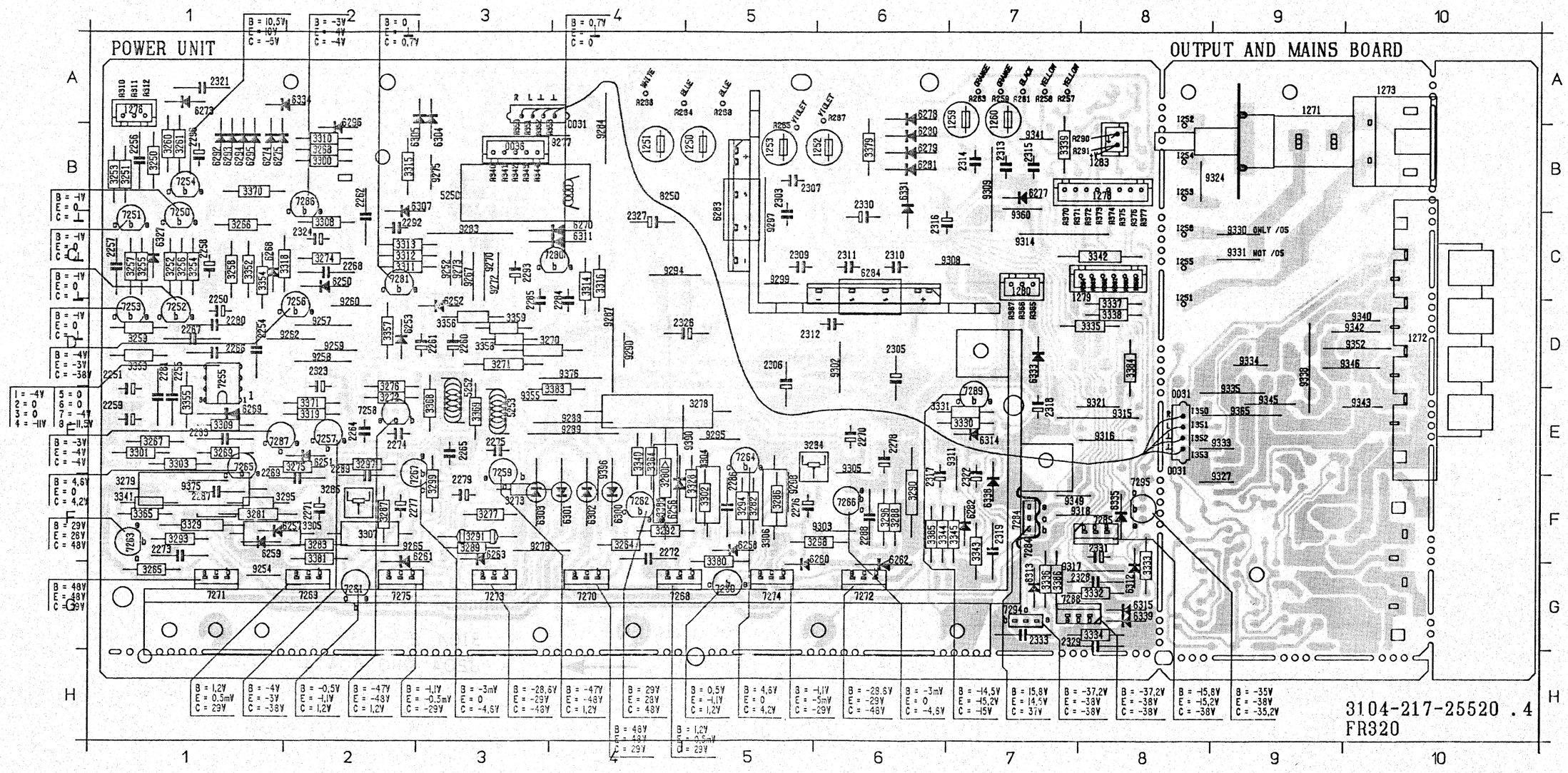
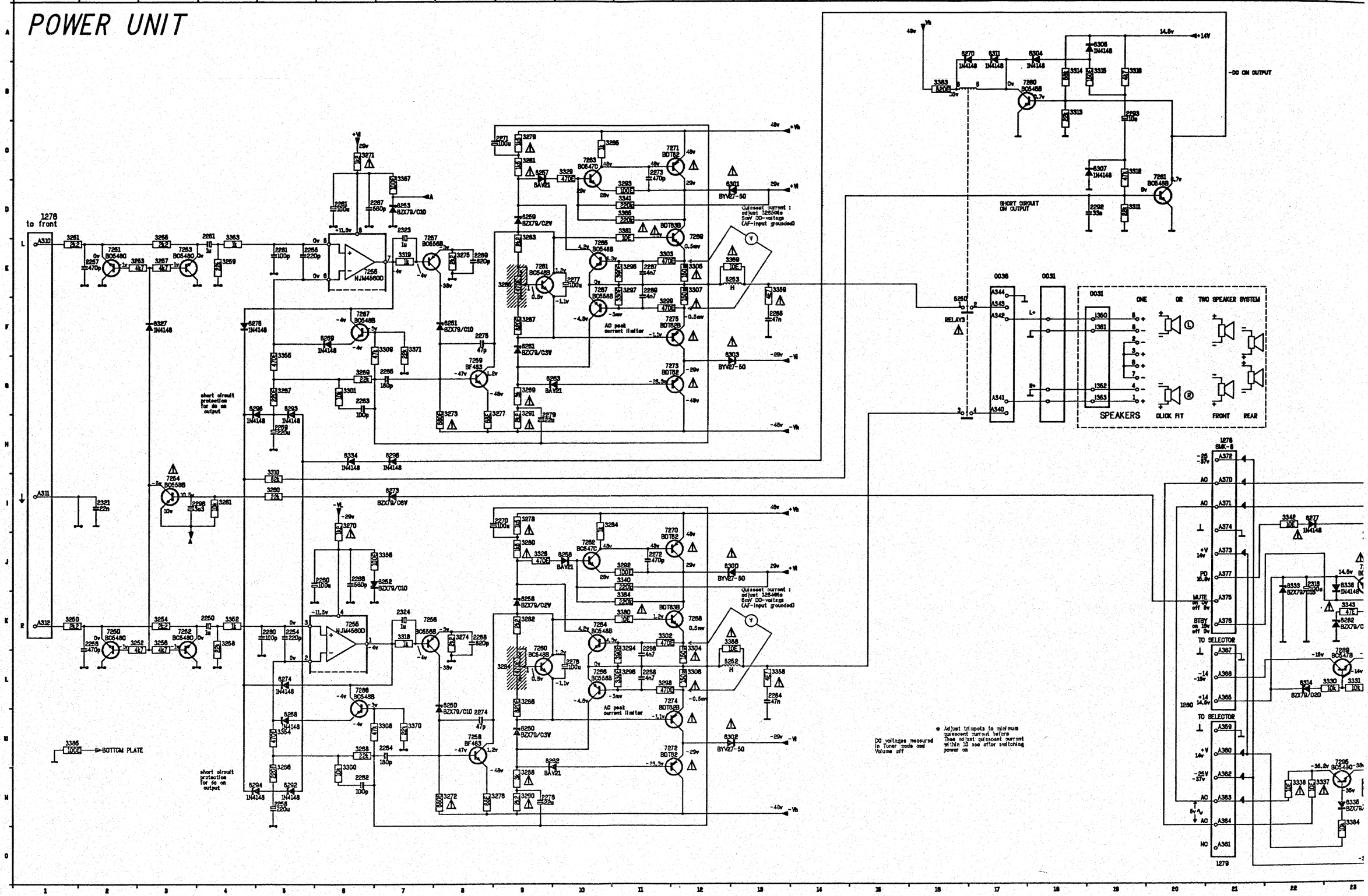
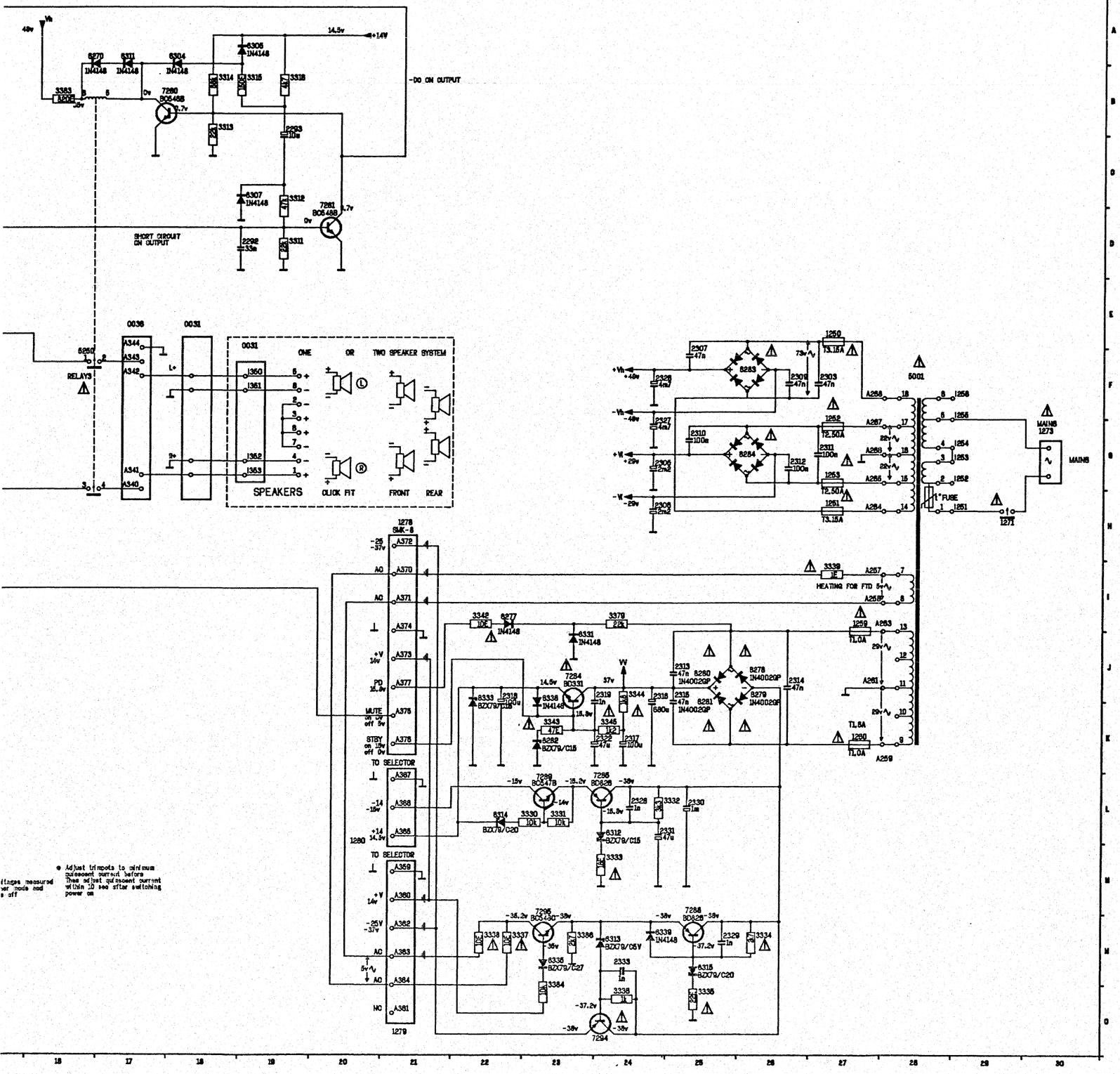
1273	A10	2264	E2	2284	D4	2314	B7	3251	B1	3271	D3	3289	F3	3307	F2	3334	G3	3358	D3	5253	E3	6275	B1	6304	B3	7263	D1	7271	G1	9254	G1	9289	E4	9321	E8	9360	C7
1278	A1	2265	E3	2285	D3	2315	B7	3252	C1	3272	E2	3290	F3	3308	G2	3335	D3	3359	D3	6250	C2	6277	B7	6305	B3	7264	B1	7272	G8	9257	D2	9290	D4	9324	B9	9365	E9
1278	B8	2266	D1	2286	F5	2316	C6	3253	B1	3273	F3	3291	F3	3309	E1	3336	D8	3384	E4	6251	E2	6278	A8	6307	B3	7265	D1	7273	G3	9258	D2	9294	C4	9327	F9	9375	F1
1279	D8	2267	D1	2287	F1	2317	F8	3254	C1	3274	C2	3292	F4	3310	B2	3337	D8	3385	F1	6252	D3	6279	B8	6311	C4	7266	D2	7274	G5	9259	D2	9295	E5	9330	C9	9376	D4
1280	C7	2268	C2	2288	F8	2318	E7	3255	C1	3275	E2	3293	F1	3311	C2	3338	D8	3386	E3	6253	D2	6280	B8	6312	G8	7257	E2	7275	G2	9260	D2	9297	C5	9331	C9	9390	E5
1283	B3	2269	F1	2289	E2	2319	F7	3256	C1	3276	E2	3294	F5	3312	C2	3339	B7	3389	E3	6258	F4	6281	B8	6313	G7	7258	E2	7280	C4	9262	D2	9298	F5	9333	E9	9398	E4



POWER UNIT


1278 to front
A310
A311
A312
-Vl
+Vl
+Vh
-Vh
+11.5v
-11.5v
7256 NJM4560D
short circuit protection for dc on output
AO peak current limiter
Quiescent current : adjust 3264Ohm 8mV DO-voltage (AF-input grounded)
-DO ON OUTPUT
SHORT CIRCUIT ON OUTPUT
RELAY3
SPEAKERS
ONE
OR
TWO SPEAKER SYSTEM
CLICK FIT
FRONT
REAR
TO SELECTOR
1278 SMK-8
1279
1280
BOTTOM PLATE
DO voltages measured in Tuner mode and Volume off
* Adjust trimpots to minimum quiescent current before. Then adjust quiescent current within 10 sec after switching power on



* Adjust trimpots to minimum quiescent current before then adjust quiescent current within 20 sec after switching power on

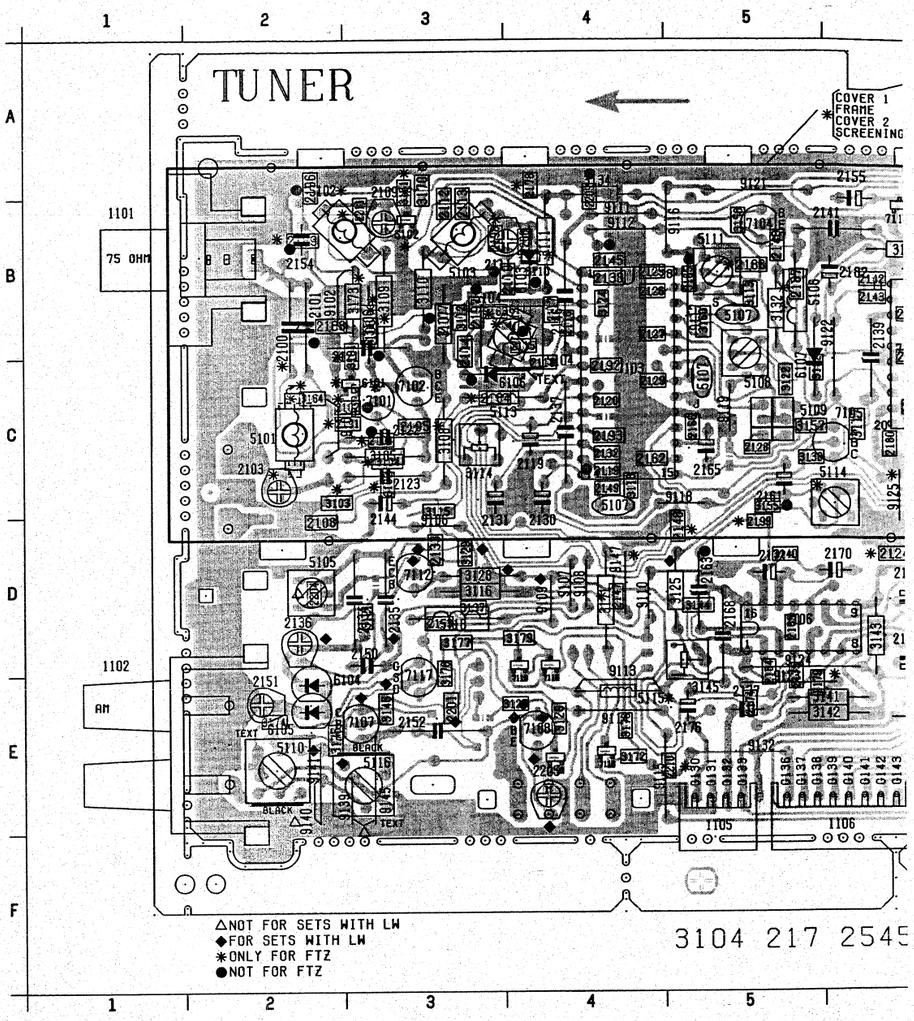
ltages measured
ver mode and
e off

TUNER Adjustment table

Waverange	Input frequency	Input	Set tuned to	Adjust	Output	Scope / Voltmeter
VARICAP ALIGNMENT						
FM 87,5 - 108 MHz			108 MHz	5104		8V ± 50 mV
			87,5 MHz	check		2,7V ± 400 mV
AM (2-band version) 530 - 1700 kHz [1]			1700 kHz	2136		7,6V ± 100 mV
			530 kHz	check	◇1	1V ± 200 mV
LW 148 - 284 kHz			284 kHz	5105		8,4V ± 200 mV
MW (3-band version) 522 - 1611 kHz [2]			1611 kHz	2136		8,5V ± 100 mV
FM - RF [3]						
FM	87,5 MHz mod = 1 kHz Δf = 22,5 kHz	◇A	87,5 MHz	5103	◇2	max. ↕
				5101 [4] 5102 [4]		
	108 MHz mod = 1 kHz Δf = 22,5 kHz		108 MHz	2111		
				2102 [4] 2109 [4]		
FM - IF						
FM	108 MHz Δf = 500 kHz as low as possible		108 MHz	5111		symmetrical and max. height
STEREO DECODER						
FM	98 MHz carrier 1 mV	◇A	98 MHz	3145	◇3	19 kHz ± 50 Hz
SEARCH SENSITIVITY						
FM	98 MHz carrier 12 µV	◇A	98 MHz	3114	◇4	adjust so that voltage switches from low to high
FM	98 MHz carrier 15 µV	◇A	99 MHz or 97 MHz	check		press DOWN or UP and check that set stops at 98 MHz
FM Autostore [5]	98 MHz carrier 350 µV	◇A	99 MHz or 97 MHz	check		press DOWN or UP and check that set stops at 98 MHz
AM - IF						
MW	522 kHz [6] Δf = 10 kHz as low as possible	◇B via 100nF	522 kHz	5108	◇2	symmetrical and max. height
AM - RF						
MW mod = 1 kHz 30% AM	558 kHz	◇C	558 kHz	5110	◇2	max. ↕
	1494 kHz		1494 kHz	2151		
LW mod =1 kHz 30% AM	155 kHz		155 kHz	5116		max.
	270 kHz		270 kHz	2205		

1101	B 1	2161	C 5	3121	D 3	5112	C 6	9145	E 3						
1102	D 1	2162	C 4	3122	C 5	5113	C 4	9147	D 4						
1105	E 5	2163	D 5	3124	B 4	5114	C 6								
1106	E 6	2164	D 5	3125	D 5	5115	E 4								
2100	B 2	2165	C 5	3126	E 4	5116	E 3								
2101	B 2	2166	C 5	3127	E 4	5118	D 3								
2102	C 3	2167	D 6	3128	D 3	6101	C 3								
2103	C 2	2168	D 5	3129	D 3	6102	B 3								
2104	C 3	2169	D 5	3130	C 5	6103	B 4								
2105	C 3	2170	D 6	3131	C 6	6104	E 3								
2106	B 3	2171	B 6	3132	B 5	6105	E 2								
2107	B 3	2172	D 5	3133	C 6	6106	C 4								
2108	D 2	2173	D 6	3134	A 4	6107	C 5								
2109	A 3	2174	E 5	3135	C 7	6109	D 6								
2110	B 4	2175	E 5	3136	B 7	6110	B 4								
2111	B 3	2176	E 5	3137	D 3	6111	B 4								
2112	B 3	2177	E 5	3138	B 7	7101	C 3								
2113	B 3	2178	A 4	3139	B 6	7102	C 3								
2114	B 3	2179	E 5	3140	D 5	7103	C 4								
2115	B 4	2180	C 6	3141	E 6	7104	B 5								
2116	B 4	2181	C 6	3142	E 6	7105	C 6								
2117	B 4	2182	B 6	3143	D 6	7106	D 5								
2118	C 4	2183	C 6	3144	D 5	7107	E 3								
2119	C 4	2184	C 3	3145	E 5	7108	E 4								
2120	C 4	2185	C 6	3146	E 3	7109	E 4								
2121	C 3	2186	B 5	3147	B 6	7110	B 6								
2122	C 3	2187	B 5	3148	D 6	7111	C 6								
2123	C 3	2188	B 2	3149	D 6	7112	D 3								
2124	D 6	2189	B 2	3150	D 6	7113	B 6								
2125	B 4	2191	C 3	3151	D 6	7114	B 6								
2126	B 4	2192	C 4	3153	E 6	7115	B 6								
2127	B 4	2193	C 4	3155	C 5	7116	E 4								
2128	C 5	2195	C 7	3156	B 6	7117	E 3								
2129	C 4	2196	A 2	3157	C 5	7118	E 4								
2130	D 4	2197	B 3	3158	B 5	7119	E 4								
2131	D 3	2198	B 3	3160	B 5	9101	C 3								
2132	C 4	2199	D 5	3161	A 3	9102	B 2								
2133	D 3	2200	B 6	3162	C 5	9106	D 3								
2134	D 3	2201	E 3	3163	B 3	9107	D 4								
2135	D 3	2204	D 2	3164	C 2	9108	D 4								
2136	D 2	2205	E 4	3165	B 5	9109	D 4								
2137	C 4	2208	B 4	3170	A 3	9110	D 4								
2138	B 4	2209	A 4	3171	D 4	9111	B 4								
2139	B 6	2210	E 5	3172	E 4	9112	B 4								
2140	B 5	2211	B 3	3173	B 3	9113	E 4								
2141	B 6	3101	B 3	3174	E 2	9114	E 4								
2142	B 6	3102	C 3	3175	E 2	9115	E 4								
2143	B 6	3103	C 2	3176	D 3	9116	B 5								
2144	D 3	3104	C 3	3177	D 3	9117	B 5								
2145	B 4	3105	C 3	3178	E 4	9118	C 5								
2146	B 4	3106	B 3	3179	D 4	9119	C 5								
2147	D 4	3107	B 3	5101	C 2	9121	A 5								
2148	D 5	3108	C 3	5102	A 2	9122	B 6								
2149	C 4	3109	B 3	5103	B 3	9123	E 5								
2150	D 3	3110	B 3	5104	B 3	9124	D 5								
2151	E 2	3111	B 4	5104	C 4	9125	C 6								
2152	E 3	3112	B 3	5105	D 2	9126	D 6								
2153	D 3	3113	B 5	5106	B 5	9127	B 6								
2154	B 2	3114	C 3	5107	C 4	9128	D 6								
2155	A 6	3115	C 3	5107	B 5	9129	D 6								
2156	B 6	3116	D 3	5107	C 5	9130	E 6								
2157	B 6	3117	C 6	5108	C 5	9132	E 5								
2158	C 6	3118	C 4	5109	C 5	9139	E 3								
2159	B 7	3119	C 4	5110	E 2	9140	E 2								
2160	C 7	3120	C 6	5111	B 5	9141	E 2								

3104-217-25450 2 DATE 91-01-09 C.A.D



‡ Repeat

1) used in AUSTRALIA, CANADA and USA versions.
2) used in European versions.
3) For all sets except /02 adjust coil 5101 for nominal position (top of core approx. 3mm from topedge coil).
4) only for FTZ versions
5) Connect G136 to GND to switch set into Autostore sensitivity
6) via low impedance (5Ω) direct to pin 10 of 7103 (see fig. 1).

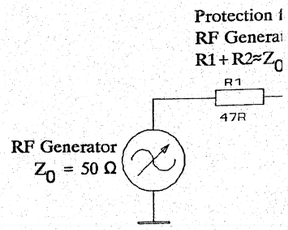
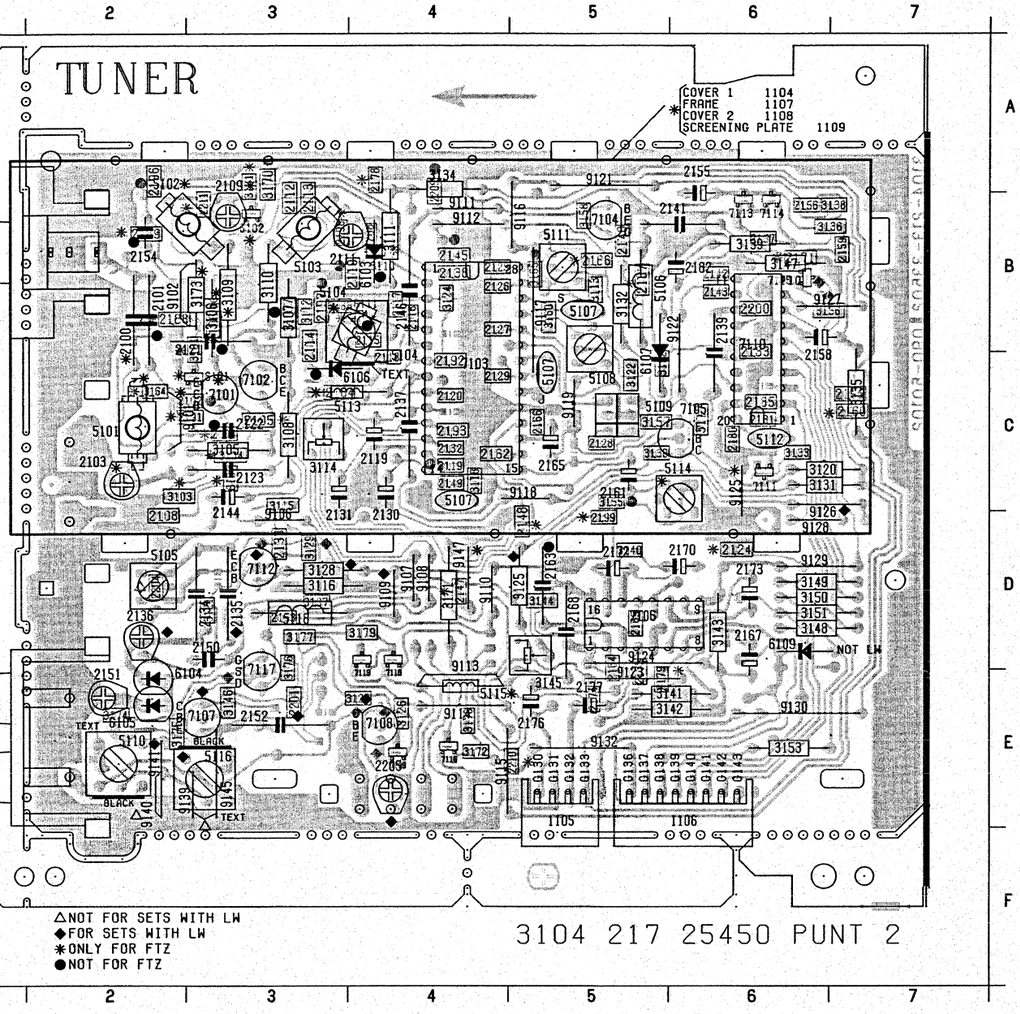
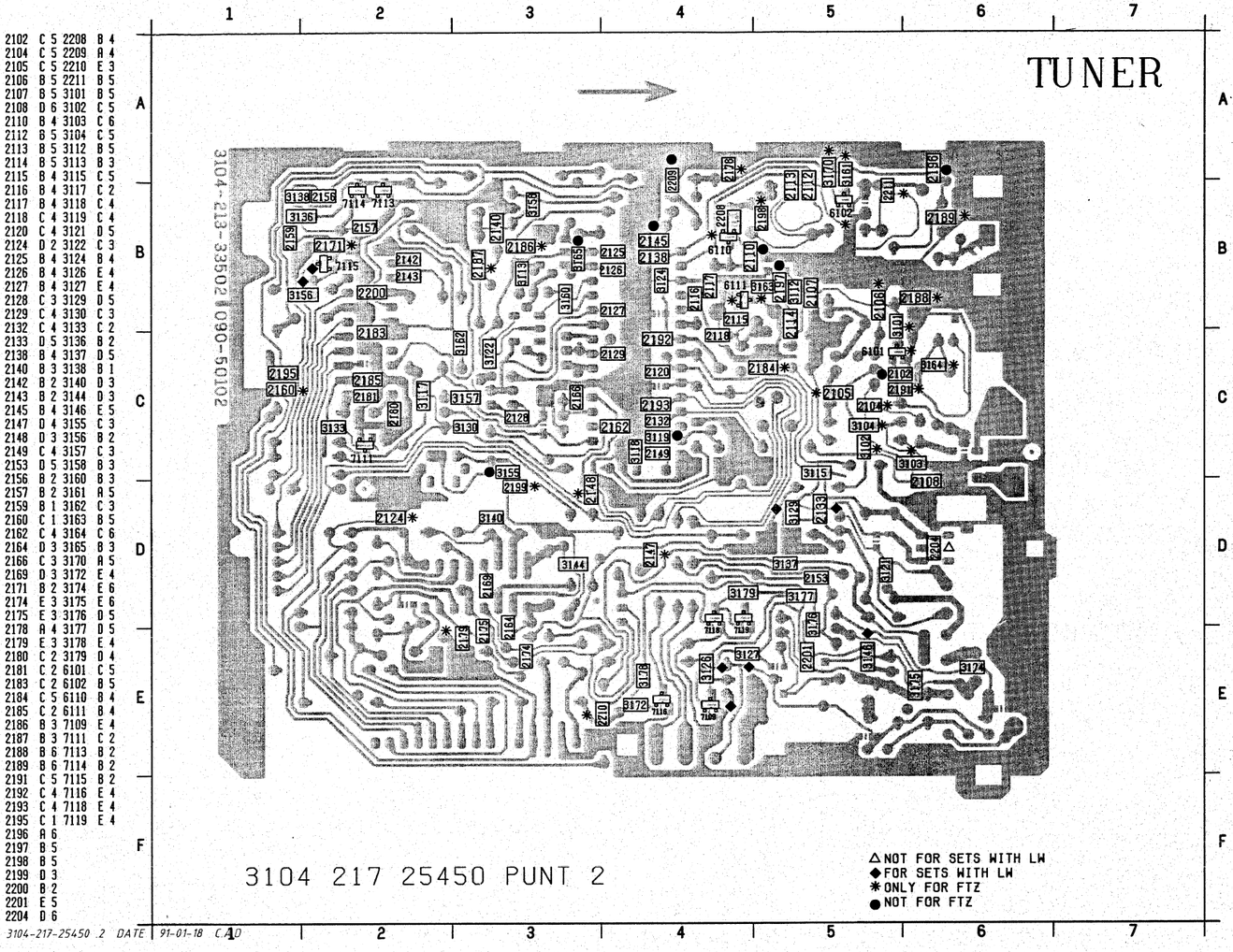


Fig. 1





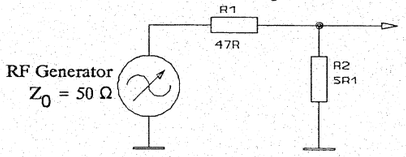
2102	C 5	2208	B 4
2104	C 5	2209	A 4
2105	C 5	2210	E 3
2106	B 5	2211	B 5
2107	B 5	3101	B 5
2108	D 6	3102	C 5
2110	B 4	3103	C 6
2112	B 5	3104	C 5
2113	B 5	3112	B 5
2114	B 5	3113	B 3
2115	B 4	3115	C 5
2116	B 4	3117	C 2
2117	B 4	3118	C 4
2118	C 4	3119	C 4
2120	C 4	3121	D 5
2124	D 2	3122	C 3
2125	B 4	3124	B 4
2126	B 4	3126	E 4
2127	B 4	3127	E 4
2128	C 3	3129	D 5
2129	C 4	3130	C 3
2132	C 4	3133	C 2
2133	D 5	3136	B 2
2138	B 4	3137	D 5
2140	D 3	3138	B 1
2142	B 2	3140	D 3
2143	B 2	3144	D 3
2145	B 4	3146	E 5
2147	D 4	3155	C 3
2148	D 3	3156	B 2
2149	C 4	3157	C 3
2153	D 5	3158	B 3
2156	B 2	3160	B 3
2157	B 2	3161	A 5
2159	B 1	3162	C 3
2160	C 1	3163	B 5
2162	C 4	3164	C 6
2164	D 3	3165	B 3
2166	C 3	3170	A 5
2169	D 3	3172	E 4
2171	B 2	3174	E 6
2174	E 3	3175	E 6
2175	E 3	3176	D 5
2178	A 4	3177	D 5
2179	E 3	3178	E 4
2180	C 2	3179	D 4
2181	C 2	6101	C 5
2183	C 2	6102	B 5
2184	C 5	6110	B 4
2185	C 2	6111	B 4
2186	B 3	7109	E 4
2187	B 3	7111	C 2
2188	B 6	7113	B 2
2189	B 6	7114	B 2
2191	C 5	7115	B 2
2192	C 4	7116	E 4
2193	C 4	7118	E 4
2195	C 1	7119	E 4
2196	A 6		
2197	B 5		
2198	B 5		
2199	D 3		
2200	B 2		
2201	E 5		
2204	D 6		

3104-217-25450 .2 DATE 91-01-18 CAD

(top of core approx. 3mm from topedge coil).

ity

Protection for
RF Generator
$R1+R2 \approx Z_0 = 50\Omega$



to pin 10 of 7103

$$Z = \frac{R2 * (Z_0 + R1)}{R2 + (Z_0 + R1)} \approx 5\,\Omega$$

Fig. 1

TUNER

FM FRONTEND

FM-IF

FM-DET

FM-OSCILLATOR

HERA IN FM

SEARCH LEVEL

TO AM-PART

SYNTHESIZER

LOOPFILTER

Varicap voltage	
FM 87.5MHz	+1.8 V
MW 522 KHz	+1.3 V
LW 150 KHz	+1.4 V
FM 108 MHz	+10 V
MW 1611 KHz	+7.2 V
LW 283 KHz	+7.7 V

AM-FRAME AERIAL

AM-RF

NOT FOR /10 /38

AM-IF

AM-DET

HERA IN AM

LATCH SRQ

DATA 5

CL 4

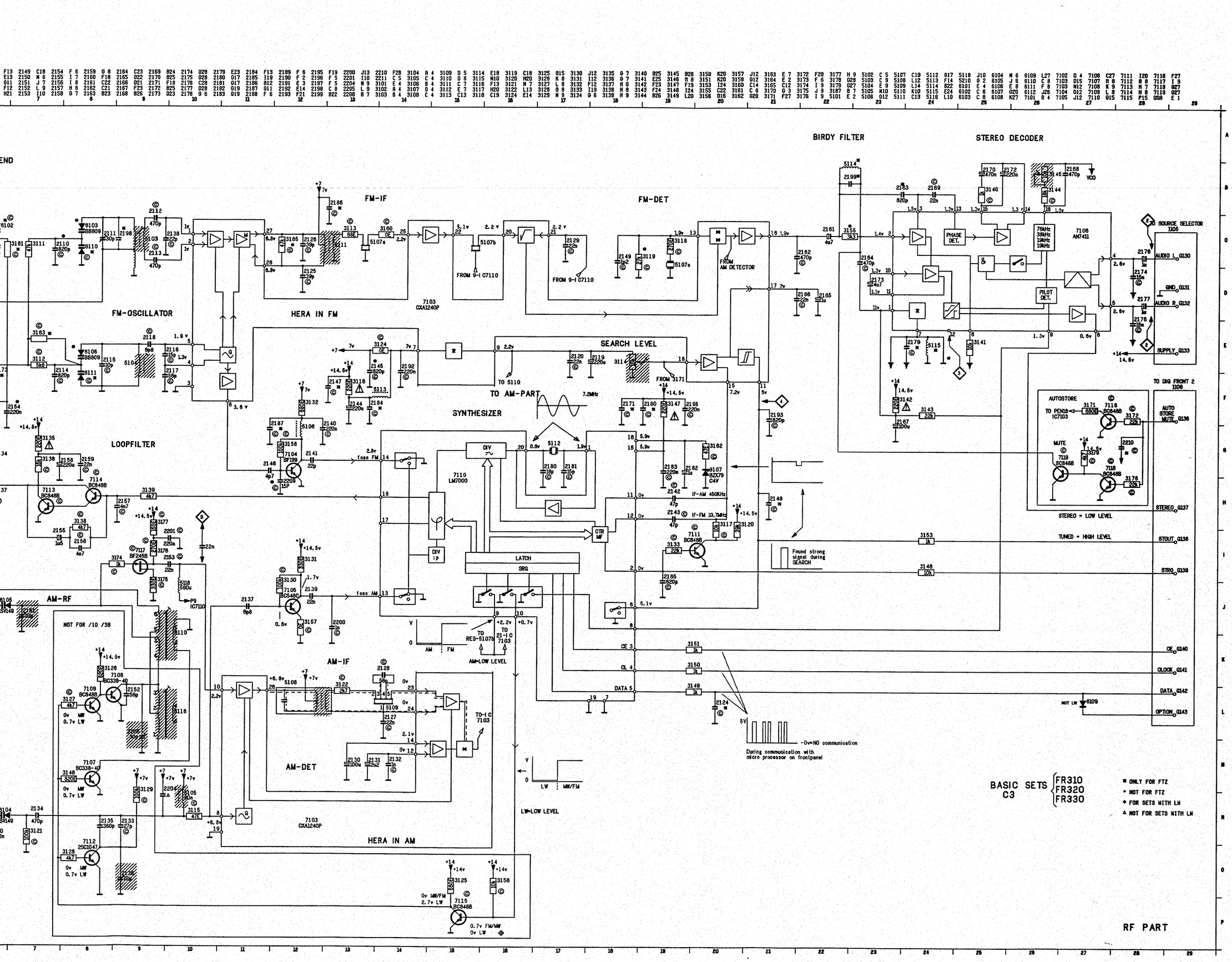
CE 3

IF-AM 460KHz

IF-FM 10.7MHz

Found stron signal durin SEARCH

During communication with micro processor on frontpane


FM-IF
FM-DET
BIRDY FILTER
STEREO DECODER
FM-OSCILLATOR
HERA IN FM
SEARCH LEVEL
TO AM-PART
SYNTHESIZER
LOOPFILTER
AM-RF
AM-IF
AM-DET
HERA IN AM
NOT FOR /10 /38
FROM 9-I C7110
FROM AM DETECTOR
TO 5110
TO RES-5107b
TO 21-I C 7103
AM-LOW LEVEL
LW-LOW LEVEL
TO I C 7103
7103 CXA1240P
7110 LM7000
7106 AN7411
PHASE DET.
PILOT DET.
76kHz 38kHz 19kHz
VCO
SOURCE SELECTOR 1105
AUDIO L Q130
GND Q131
AUDIO R Q132
SUPPLY Q133
TO DIG FRONT 2 1106
AUTOSTORE
AUTO STORE MUTE Q136
MUTE
STEREO Q137
STEREO = LOW LEVEL
TUNED = HIGH LEVEL
STOUT Q138
STRQ Q139
CE Q140
CLOCK Q141
DATA Q142
OPTION Q143
Found strong signal during SEARCH
During communication with micro processor on frontpanel
-0v=NO communication
IF-AM 450KHz
IF-FM 10.7MHz
BASIC SETS C3
FR310
FR320
FR330
* ONLY FOR FTZ
• NOT FOR FTZ
◆ FOR SETS WITH LN
△ NOT FOR SETS WITH LN
RF PART

DIGITAL FRONT 2

TACT SWITCH

TO TACT SWITCH PANEL D040

TO DIGITAL FRONT 1

TO DIGITAL FRONT 2

TO ANALOG FRONT

TO TUNER

TO SOURCE SELECT

TO DIG FRONT 1

TO DIG FRONT 2

POWER

VOL LED

PART K

IR RECIEVER

TIMER OSC

OSC

INPUT PORT

I/O PORT R3

OUTP PORT P0

I/O PORT P7

OUTP PORT P1

I/O PORT R9

I/O PORT R6

OUTP. PORT P2

I/O PORT R8

INP. PORT R8

CPU

VFT DRIVER CONTROL

7481 PCF74HCT1

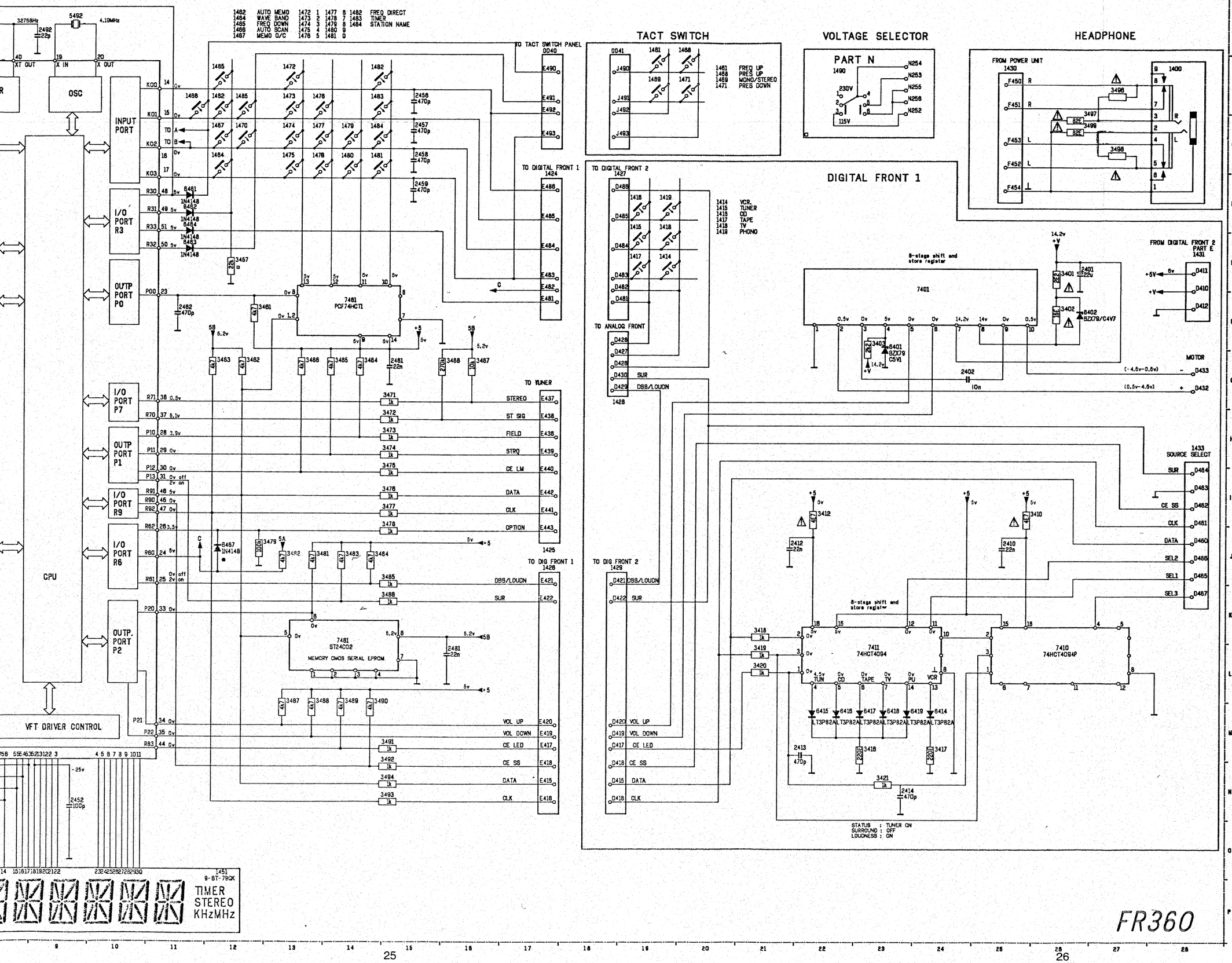
7481 ST24C02 MEMORY CMOS SERIAL EPROM

MEMORY MW LW FM AM

TIMER STEREO KHzMHz

9-BT-78QX

ES.3104-217-03180.SERV.ES-UNIT



10m	G25	3482	J13
1414	E19	3483	J14
1415	D19	3484	J14
1416	D19	3485	J15
1417	E19	3486	K15
1418	D19	3487	M13
1419	D19	3488	M13
1420	A1	3489	M14
1421	B1	3490	M14
1422	D1	3491	M15
1423	K1	3492	N15
1424	D17	3493	N15
1425	J17	3494	N15
1426	J17	3496	B27
1427	D19	3497	C26
1428	G19	3498	C27
1429	J18	3499	C26
1435	H4	5491	A8
1436	H3	5492	A8
1451	D12	6401	F23
1461	A19	6402	F26
1462	B12	6403	C6
1463	I2	6404	A7
1464	C12	6414	M24
1465	B12	6415	M22
1466	B11	6416	M22
1467	C12	6417	M23
1468	A20	6418	M23
1469	B19	6419	M23
1470	C12	6430	B3
1471	B20	6431	A3
1472	B13	6432	B3
1473	B13	6433	B4
1474	C13	6434	D3
1475	C13	6435	F5
1476	B13	6436	G6
1477	C13	6437	B2
1478	C13	6461	D11
1479	C14	6462	D11
1480	C14	6463	E11
1481	C14	6464	D11
1482	B14	6467	J12
1483	B14	7401	F24
1484	C14	7403	B5
1485	B12	7410	L26
2401	E26	7411	L23
2402	G24	7431	B3
2403	C5	7432	C5
2410	J25	7433	E4
2412	J21	7434	F5
2413	N22	7441	H5
2414	N23	7442	H6
2424	D3	7443	I6
2425	D2	7451	K4
2426	C4	7452	L6
2427	C4	7461	F14
2428	C6	7471	D8
2429	G5	7481	L14
2430	G6		
2431	H6		
2434	P5		
2435	P5		
2439	A2		
2441	H3		
2451	M6		
2452	M9		
2456	B15		
2457	C15		
2458	C15		
2459	D15		
2461	G15		
2462	F11		
2481	L16		
2491	A7		
2492	A9		
3401	E26		
3402	F26		
3403	F23		
3404	B5		
3405	A5		
3410	I25		
3412	I22		
3416	M23		
3417	M24		
3418	K21		
3419	L21		
3420	L21		
3421	K23		
3424	B2		
3425	C2		
3426	C3		
3427	C6		
3428	C5		
3429	E5		
3430	D5		
3431	E5		
3432	E6		
3434	P4		
3435	P4		
3436	E7		
3437	P4		
3440	H5		
3441	H4		
3442	H6		
3443	I6		
3444	I6		
3445	J6		
3446	J6		
3447	I5		
3451	K5		
3452	K6		
3453	K6		
3454	L5		
3455	L5		
3457	E12		
3461	F12		
3462	G12		
3463	G12		
3464	G14		
3465	G14		
3466	G13		
3467	G16		
3468	G16		
3471	G15		
3472	H15		
3473	H15		
3474	H15		
3475	I15		
3476	I15		
3477	I15		
3478	J15		
3479	J12		
3481	J13		

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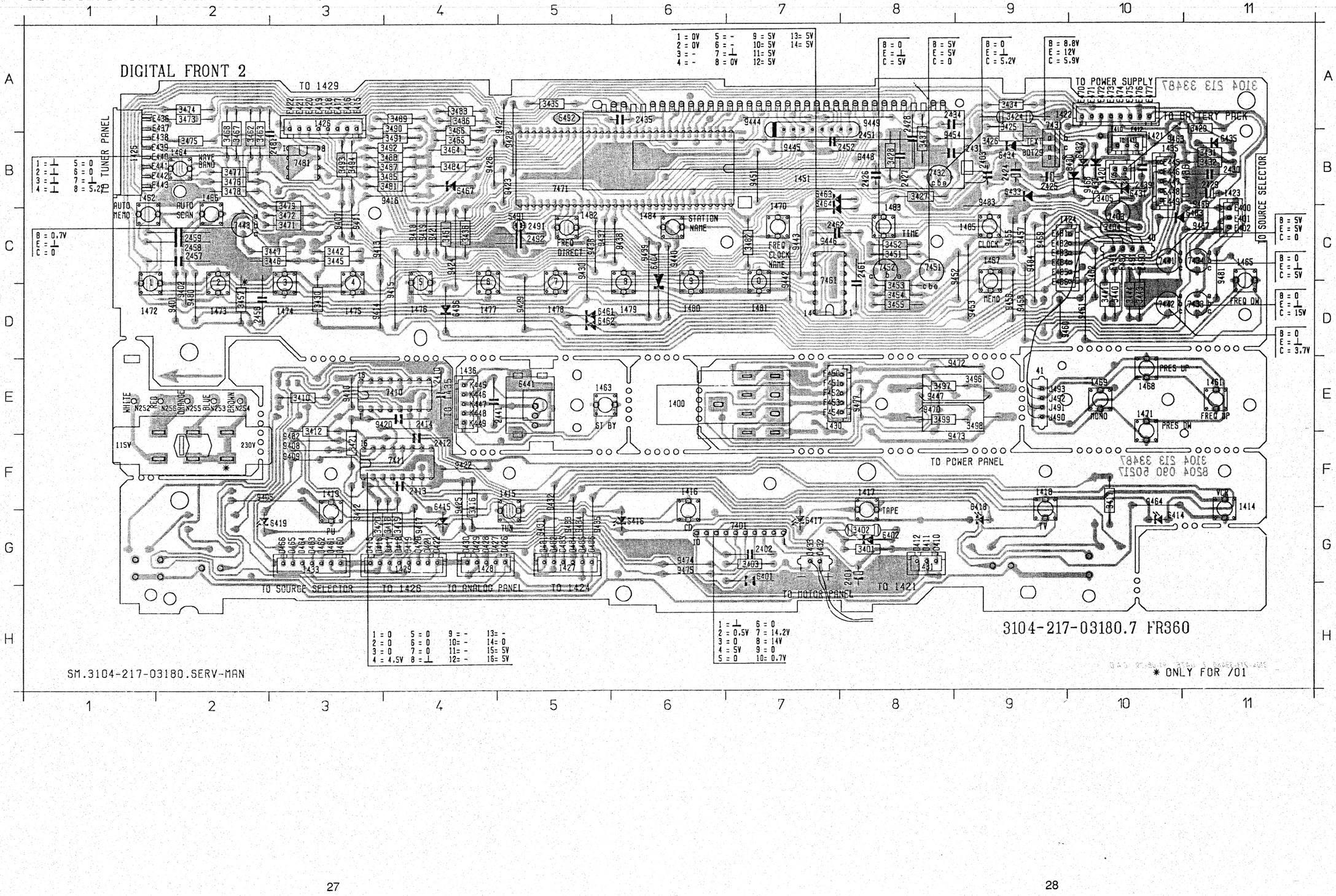

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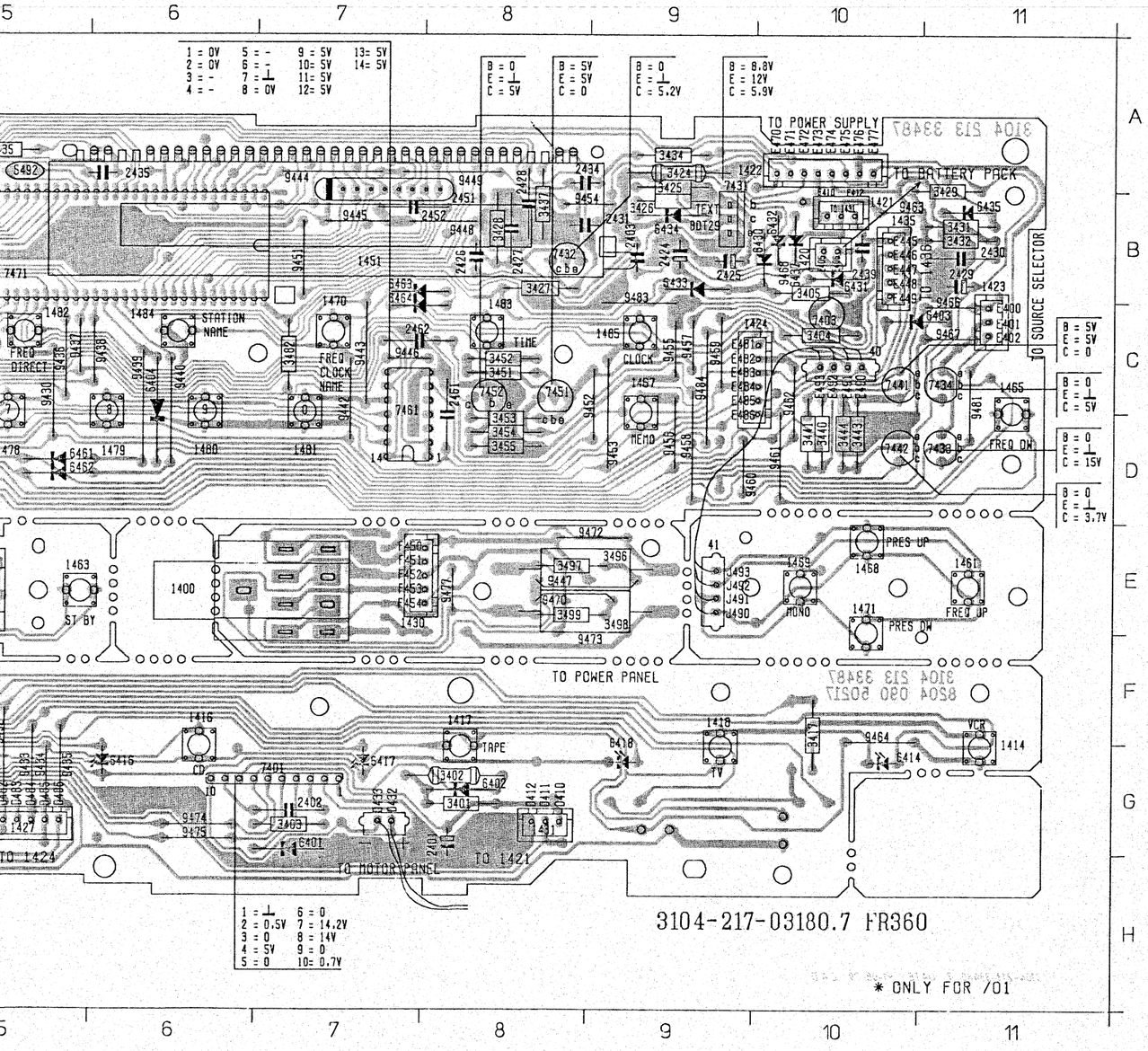

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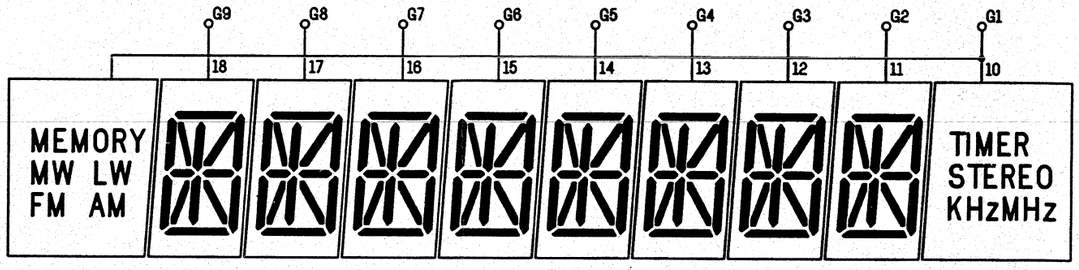

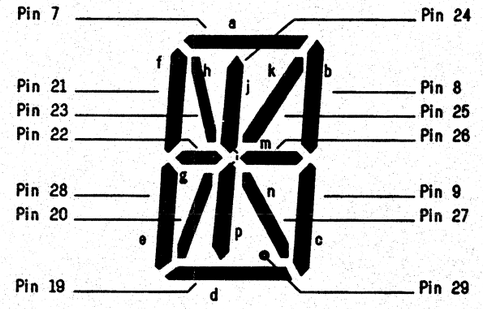

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CONNECTION	F 2	F 2	N P	N P	N C	P 15	P 14	P 13	P 12	P 11	P 10	P 9	P 8	P 7	P 6	P 5	P 4	G 9	G 8	G 7	G 6	G 5	G 4	G 3	G 2	G 1	P 3	P 2	P 1	N C	N C	N P	N P	F 1	F 1

ANODE CONNECTION

	G9	G8	G7	G6	G5	G4	G3	G2	G1
P1	a	a	a	a	a	a	a	a	TIMER
P2	b	b	b	b	b	b	b	b	STEREO
P3	c	c	c	c	c	c	c	c	kHz
P4	d	d	d	d	d	d	d	d	MHz
P5	e	e	e	e	e	e	e	e	MEMORY
P6	f	f	f	f	f	f	f	f	MW
P7	g	g	g	g	g	g	g	g	LW
P8	h	h	h	h	h	h	h	h	FM
P9	j,p	j,p	j,p	j,p	j,p	j,p	j,p	j,p	AM
P10	k	k	k	k	k	k	k	k	-
P11	m	m	m	m	m	m	m	m	-
P12	n	n	n	n	n	n	n	n	-
P13	r	r	r	r	r	r	r	r	-
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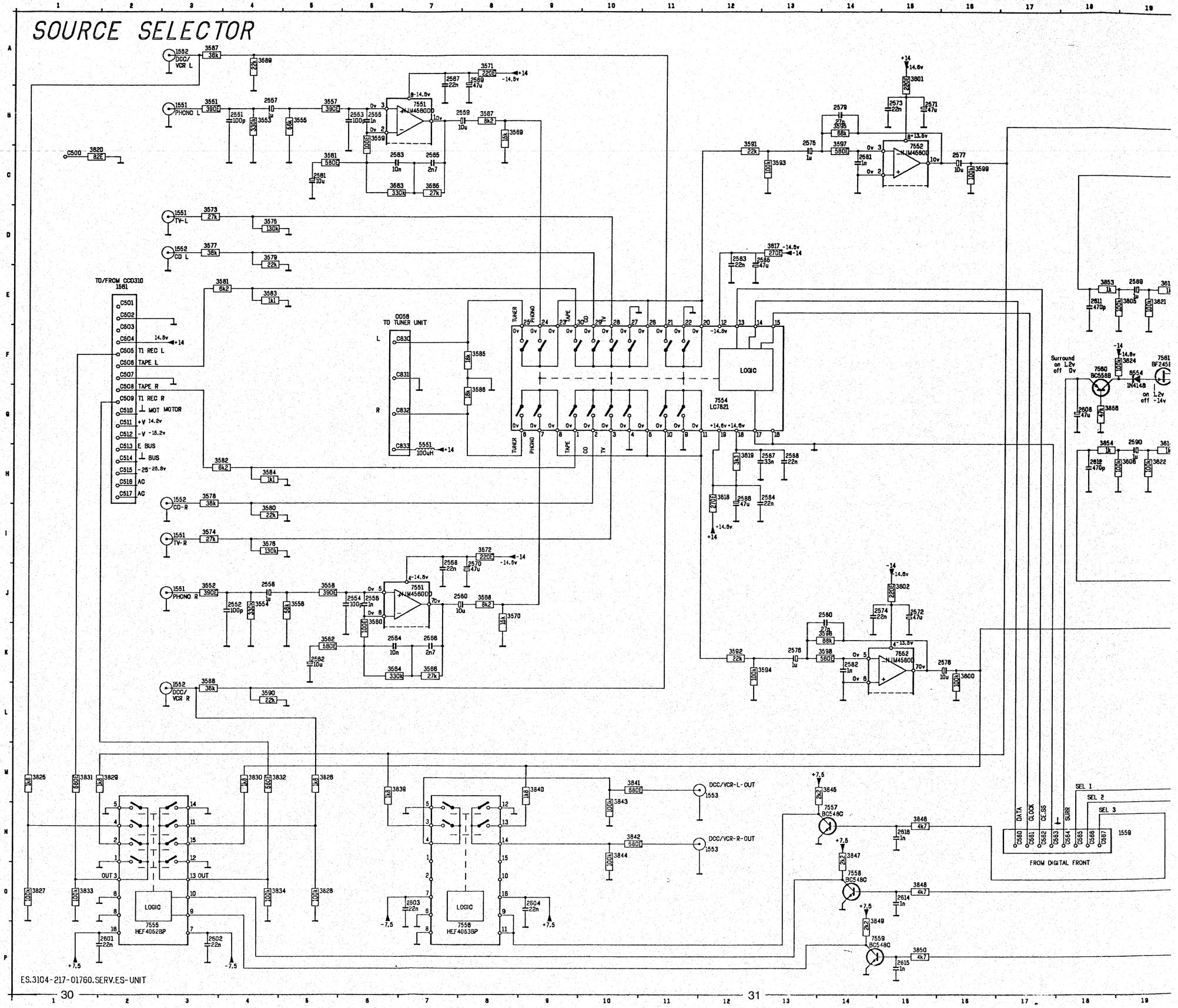

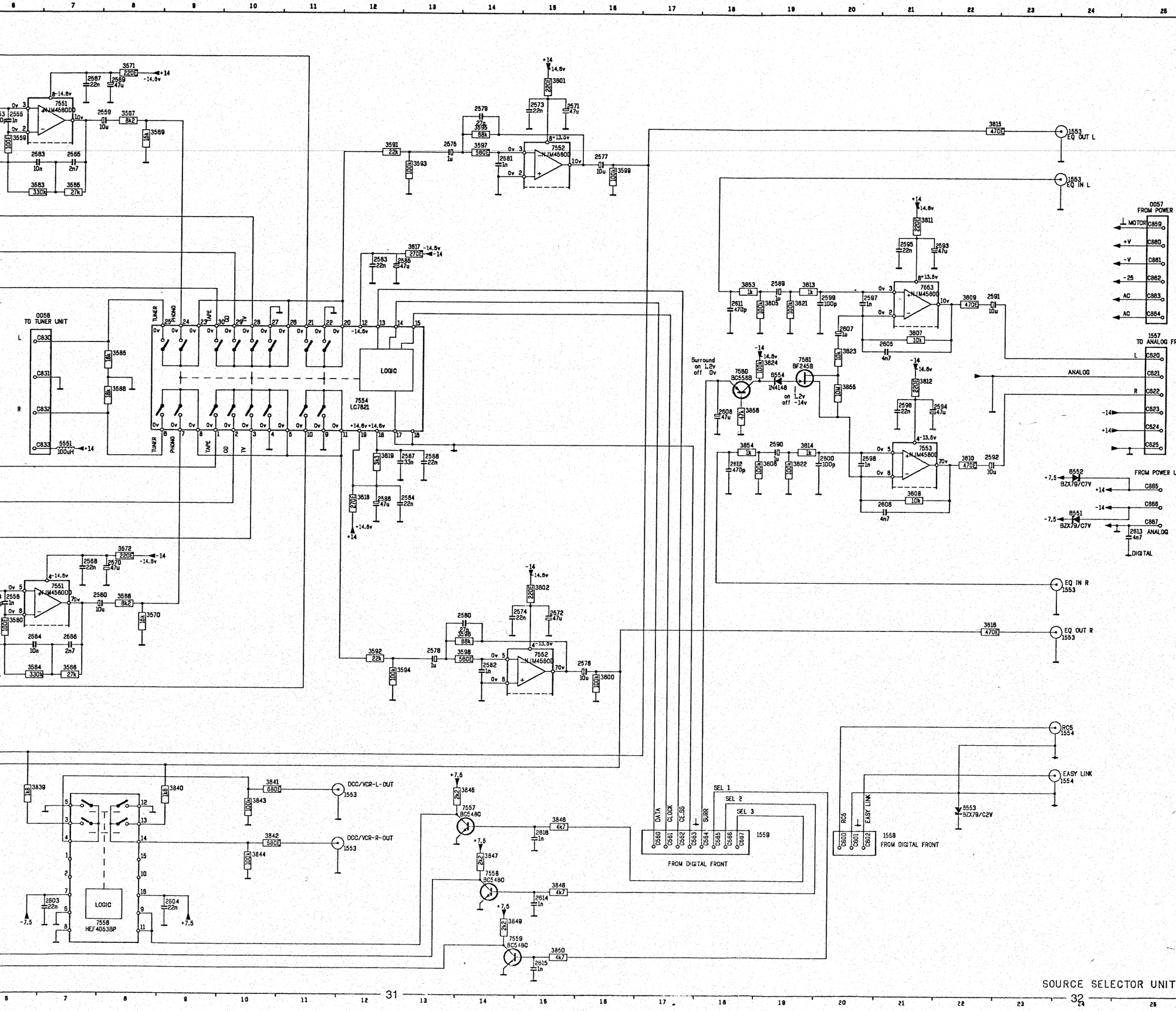

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	1553 B24	3619 H12
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	2551 B4	3624 F19
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	2553 B6	3626 M5
	2554 J6	3627 D1
	2555 B6	3628 D5
	2556 J6	3629 M2
	2557 B4	3630 M4
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	2561 C5	3634 D4
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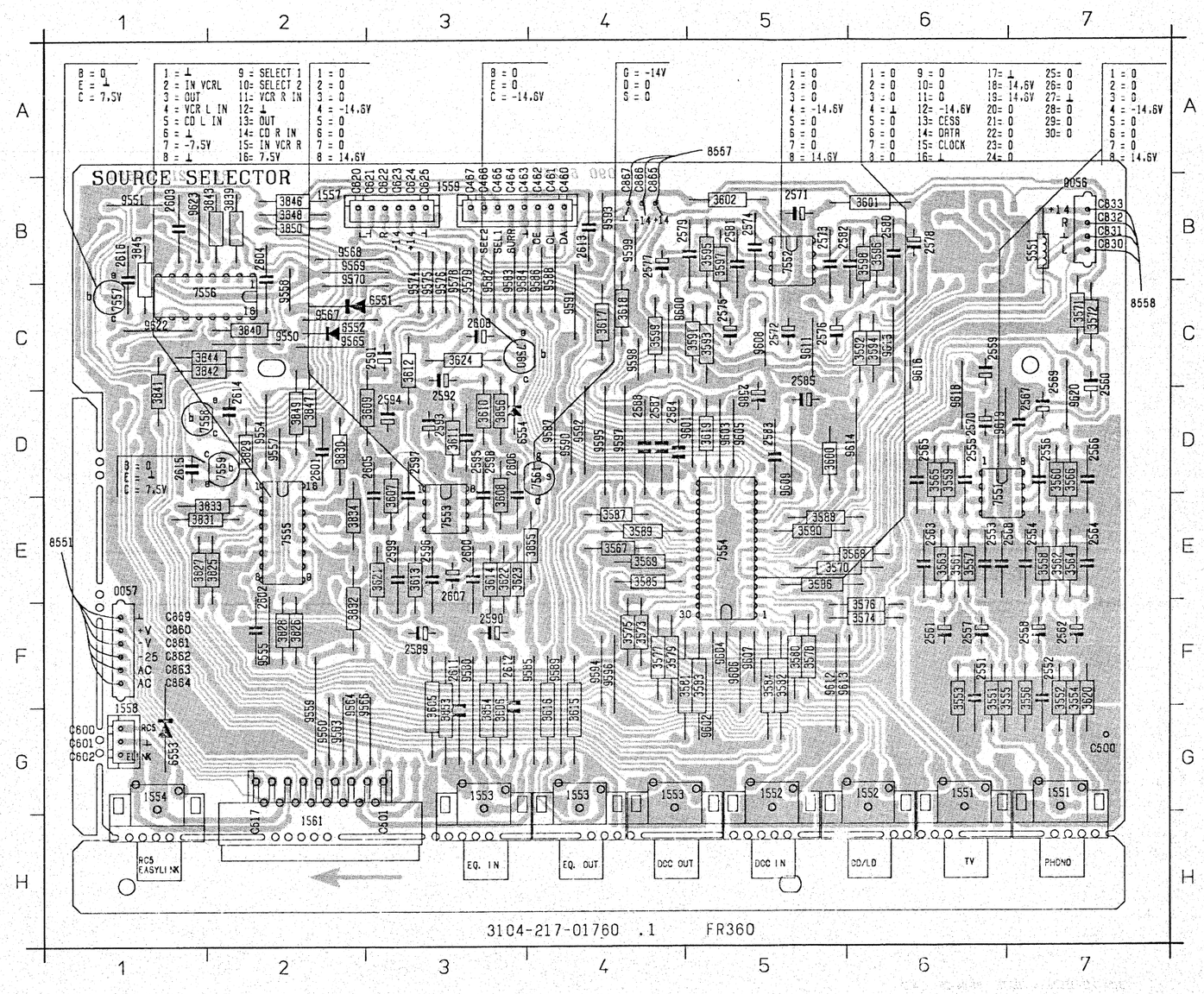

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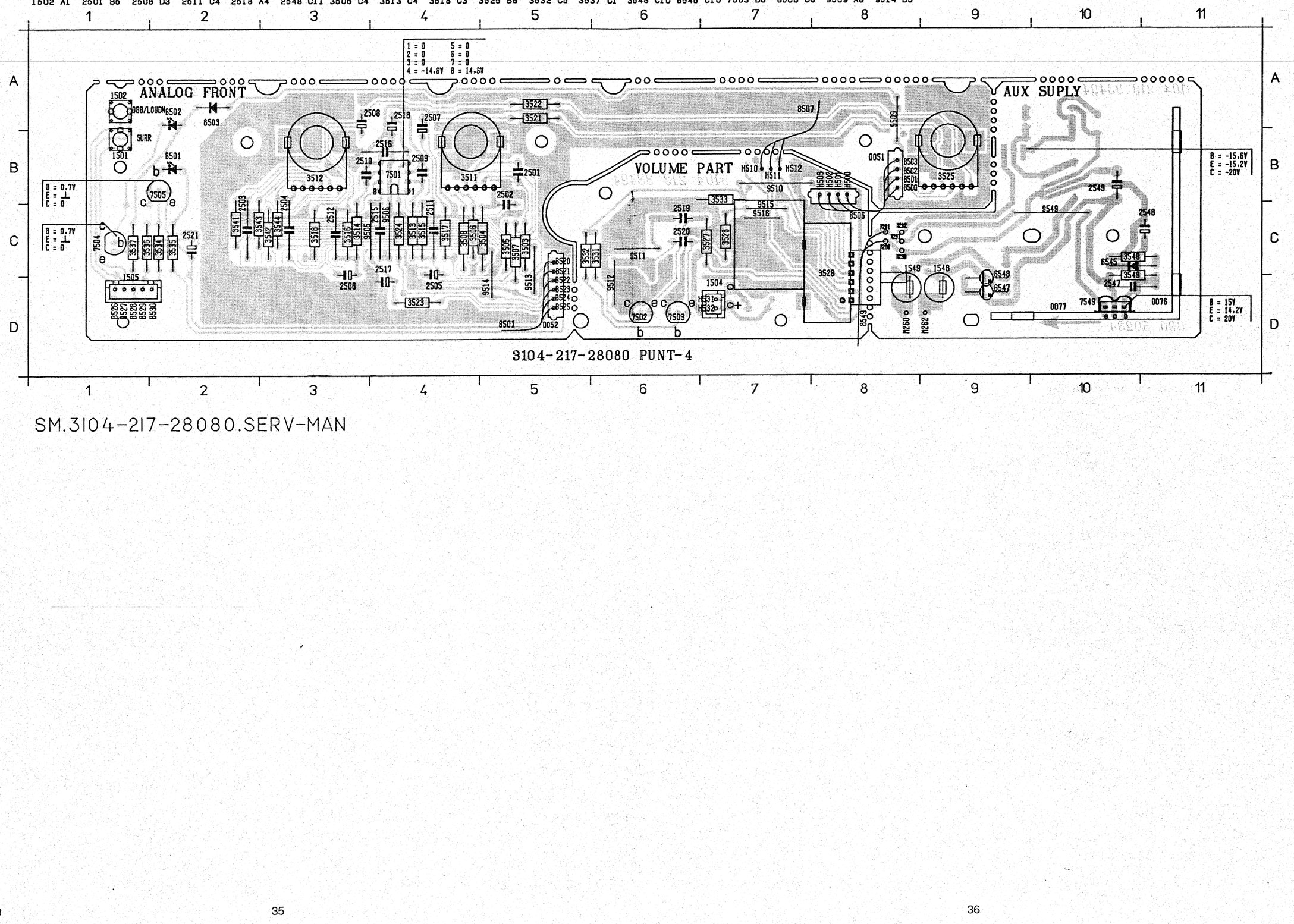

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B521
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B523
B524
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-14.6
+14.6

BASS 2501 27n
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3511 A 50k
3505 12k
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2503 1n2
3541 4k7
50k 3512 A TREBLE
3543 4k7

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B502
B503

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BALANCE

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8501 LT3P82A
14.8v +14
3537 820E
6503 BZX79/C9V
8502 LT3P82A

1505
FROM DIGITAL FRONT
SURROUND
DBB LOUDNESS
B530
B529
B528
B527
B528
1501 SURR
1502 DBB LOUDNESS
on =0.7v off= 0v
7505 BC548B
3534 1k
on =0.7v off= 0v
7504 BC548B
3538 1k
2521 47u

VOLUME PART

1504
TO DIGITAL FRONT
H632
H631
MOTOR

0051
TO ANALOG FRONT
H500
H501
H502
H503

3526 A 20k
3527 1k5
7502 BC338-40
3531 1k
off=0.7v on = 0v
2519 180n
TO POWER PANEL
H510 L
H511
H512 R

3526 B 20k
3528 1k5
7503 BC338-40
3532 1k
3533 100k
off=0.7v on = 0v
2520 180n

AUX SUPPLY

TO POWER PANEL
M291 +V
M290
7549 BD331
14.2v 20v
15v
6548 BYV27-50
1549 1A6
FROM TRAFO M280
30v
3549 1k
6547 BYV27-50
1548 1A6
M282
2547 1n
6545 BZX79/C15
3548 47E
2548 100u
2549 4m7

MECHANICAL PARTSLIST

401	4822 426 51583	FRONT ASSY
402	4822 459 10887	WORDMARK
403	4822 410 62226	HINGE ASSY PRESETS
404	4822 450 61675	WINDOW REMOTE
406	4822 462 41957	FOOT ASSY TUNER
407	4822 410 62216	BUTTON ASSY
408	4822 450 61691	WINDOW TUNER
409	4822 410 62218	CAP ASSY POWER
411	4822 413 51431	KNOB ASSY
412	4822 492 63086	SPRING KNOB FIX.
413	4822 492 61677	WINDOW VOLUME
414	4822 410 61131	FAKE BUTTON TUNER
416	4822 410 61132	FAKE BUTTON SELECTOR
417	4822 535 93188	POWER ROD
418	4822 417 11131	BUTTON WAVE BAND
420	4822 410 62227	HINGE ASSY TIMER
421	4822 413 41747	KNOB ASSY
422	4822 410 62225	HINGE ASSY SEL.
423	4822 410 62224	HINGE ASSY
424	4822 417 11134	BUTTON MONO/STEREO
425	4822 466 70717	LIGHT DIFFUSOR SEL.
426	4822 410 62228	HINGE ASSY VCR
427	4822 462 41956	FOOT ASSY AMP.
428	4822 462 41783	RUBBER FOOT
429	4822 462 71749	LOOP ANTENNA FOOT
430	4822 303 40055	FRAME AERIAL
431	4822 466 70716	LIGHT DIFFUSOR SUR.
432	4822 417 11132	BUTTON SURROUND
433	4822 462 41784	FOOT REARSIDE
434	4822 492 70854	EARTH SPRING
435	4822 462 41785	FOOT REARSIDE RIGHT
436	4822 404 21141	EQUALIZER BRIDGE
437	4822 426 60599	BATTERY HOLDER
	4822 290 80901	BATTERY SPRING +/-
	4822 492 70868	BATTERY SPRING +
	4822 492 70869	BATTERY SPRING -
	4822 256 91755	DISPLAY HOLDER
	4822 321 10249	MAINS CORD SET EUROPE
	4822 321 10561	MAINS CORD SET GB
	4822 321 10523	MAINS CORD AUSTRALLIA

MISCELLANEOUS

33		TR. PRESS.BRACKET
1101	4822 267 31128	SOCKET FM ANTENNA
1102	4822 267 31306	SOCKET AM ANTENNA
1250	4822 071 53152	FUSE T3.15A
1251	4822 071 53152	FUSE T3.15A
1252	4822 071 52502	FUSE T2.5A
1252	4822 071 52502	FUSE T2,5A /05
1253	4822 071 52502	FUSE T2.5A
1253	4822 071 52502	FUSE 2,5A /05
1259	4822 071 51002	FUSE T1A
1259	4822 071 56301	FUSE T630MA/05
1260	4822 071 51002	FUSE T1A
1260	4822 071 56301	FUSE T630MA/05
1271	4822 276 13055	POWER SWITCH
1272	4822 276 13311	TERMINAL SPEAKER
1273	4822 265 20291	MAINS SOCKET
1400	4822 267 30968	PHONE SOCKET
1414	4822 276 13312	TACT SWITCH
1415	4822 276 13312	TACT SWITCH
1416	4822 276 13312	TACT SWITCH
1417	4822 276 13312	TACT SWITCH
1418	4822 276 13312	TACT SWITCH
1419	4822 276 13312	TACT SWITCH
1451	4822 130 90953	FTD DISPLAY
1461	4822 276 13066	TACT SWITCH
1462	4822 276 13066	TACT SWITCH
1463	4822 276 13066	TACT SWITCH
1464	4822 276 13066	TACT SWITCH
1465	4822 276 13066	TACT SWITCH
1466	4822 276 13066	TACT SWITCH
1467	4822 276 13066	TACT SWITCH
1468	4822 276 13066	TACT SWITCH
1469	4822 276 13066	TACT SWITCH
1470	4822 276 13066	TACT SWITCH
1471	4822 276 13066	TACT SWITCH
1472	4822 276 13066	TACT SWITCH
1473	4822 276 13066	TACT SWITCH
1474	4822 276 13066	TACT SWITCH
1475	4822 276 13066	TACT SWITCH
1476	4822 276 13066	TACT SWITCH
1477	4822 276 13066	TACT SWITCH
1478	4822 276 13066	TACT SWITCH
1479	4822 276 13066	TACT SWITCH
1480	4822 276 13066	TACT SWITCH
1481	4822 276 13066	TACT SWITCH
1482	4822 276 13066	TACT SWITCH
1483	4822 276 13066	TACT SWITCH
1484	4822 276 13066	TACT SWITCH
1485	4822 276 13066	TACT SWITCH
1501	4822 276 13066	TACT SWITCH
1502	4822 276 13066	TACT SWITCH
1548	4822 071 51602	FUSE T1.6A
1549	4822 071 51602	FUSE T1.6A
1551	4822 266 30293	CINCH SOCKET
1552	4822 266 30293	CINCH SOCKET
1554	4822 267 31545	CINCH SOCKET
1561	4822 267 51174	CINCH SOCKET PLATE

CAPACITORS

2100	4822 122 31555	120pF /02
2101	4822 122 10179	33pF 5% 50V
2102	5322 122 32448	10pF 5% 50V
2103	4822 125 50355	TRIMCAP /02
2104	5322 122 32658	CHIP 22P /02
2105	5322 122 32531	CHIP 100P/02
2106	4822 122 31727	CHIP 470P/02
2107	4822 122 31727	470pF 2% 63V
2108	4822 122 31727	470pF 2% 63V
2109	4822 125 50355	TRIMCAP /02
2110	4822 122 32765	820pF 2% 63V
2111	4822 125 50355	TRIMCAP
2112	4822 122 31727	470pF 2% 63V
2113	4822 122 31727	470pF 2% 63V
2114	4822 122 32765	820pF 2% 63V
2115	5322 122 32448	10pF 5% 50V
2115	5322 122 32481	CHIP 15P/02
2116	5322 122 32481	15pF 5% 50V
2116	5322 122 32658	CHIP 22P/02
2117	5322 122 32661	56pF 5% 50V
2117	4822 122 32139	CHIP 12P/02
2118	4822 122 32507	6,8pF 5% 50V
2118	4822 122 31971	CHIP 10P/02
2119	4822 124 40196	220µF 20% 16V
2120	5322 122 32654	22nF 10% 63V
2121	4822 122 31435	470pF 10% 50V
2122	4822 122 31385	22pF 50V
2123	4822 122 31555	120pF 5% 50V
2124	4822 122 31727	CHIP 470P /02
2125	5322 122 32966	39pF 5% 50V
2125	5322 122 33538	CHIP 150P /02
2126	5322 122 32966	39pF 5% 50V
2126	5322 122 33538	CHIP 150P /02
2127	5322 122 32654	22nF 10% 63V
2128	5322 122 32661	56pF 5% 50V
2129	5322 122 32654	22nF 10% 63V
2130	4822 124 41584	100µF 20% 10V
2131	4822 124 40244	2,2µF 20% 63V
2132	5322 122 34123	1nF 10% 50V
2133	4822 122 31825	27pF 2% 63V
2134	4822 121 70104	470pF 1% 160V
2135	4822 121 70105	360pF 1% 160V
2136	4822 125 60101	10 pF VARIABLE
2137	4822 122 10436	6,8pF 10% 50V

2138	4822 122 32482	22pF 2% 63V
2139	4822 122 10166	22nF 30% 16V
2140	4822 122 32927	220nF +80-20% 50V
2141	4822 122 31385	22pF 50V
2142	5322 122 32452	47pF 5% 63V
2143	5322 122 32452	47pF 5% 63V
2144	4822 124 40196	220µF 20% 16V
2145	4822 122 32765	820pF 2% 63V
2146	4822 122 32096	4,7pF 10% 50V
2147	5322 122 32268	CHIP 470P /02
2148	4822 122 31727	CHIP 470P /02
2149	5322 122 33537	1,2pF 5% 63V
2150	4822 121 42408	220nF 5% 63V
2151	4822 125 60101	10 pF VARIABLE
2152	4822 121 70199	56pF 630V
2153	5322 122 32654	22nF 10% 63V
2154	4822 121 42408	220nF 5% 63V
2155	4822 124 41631	1,5µF 50V
2156	5322 126 10223	4,7nF 10% 63V
2157	5322 126 10223	4,7nF 10% 63V
2158	4822 124 40196	220µF 20% 16V
2159	5322 122 32654	22nF 10% 63V
2160	4822 122 31727	CHIP 470P /02
2161	4822 124 40246	4,7µF 20% 63V
2162	4822 122 31727	470pF 2% 63V
2162	4822 122 32142	CHIP 270P /02
2163	4822 122 10173	820pF 10% 50V
2164	5322 122 34099	470pF 10% 63V
2164	4822 122 33173	CHIP 560P /02
2165	4822 124 40242	1µF 20% 63V
2166	5322 122 32654	22nF 10% 63V
2167	4822 124 41643	100µF 20% 16V
2168	4822 121 70104	470pF 1% 160V
2169	5322 122 32654	22nF 10% 63V
2170	4822 124 40239	0,47µF 20% 63V
2171	4822 122 31727	CHIP 470P /02
2172	4822 124 42129	0,22µF 20% 63V
2173	4822 124 40246	4,7µF 20% 63V
2174	4822 122 33128	15nF 10% 63V
2175	4822 122 33128	15nF 10% 63V
2176	4822 124 40242	1µF 20% 63V
2177	4822 124 40242	1µF 20% 63V
2178	4822 122 33173	CHIP 560P /02
2179	5322 122 32654	CHIP 22N /02
2180	5322 122 32965	18pF 5%NPO 50V
2181	5322 122 32481	15pF 5% 50V
2182	4822 124 40242	1µF 20% 63V
2183	4822 122 32927	220nF +80-20% 50V
2184	4822 122 31727	CHIP 470P/02
2185	4822 122 32765	820pF 2% 63V
2186	4822 122 31727	CHIP 470P/02
2187	4822 122 31727	CHIP 470P/02
2188	4822 122 31727	CHIP 470P/02
2189	4822 122 31965	CHIP 220P/02
2191	5322 122 32287	CHIP 4P7/02
2192	4822 122 32927	220nF +80-20% 50V
2193	4822 122 32765	820pF 2% 63V
2195	4822 122 32927	220nF +80-20% 50V
2196	5322 122 32268	470pF 10% 50V
2197	4822 122 32765	820pF 2% 63V
2198	5322 122 32481	CHIP 15P/02
2199	5322 122 33538	CHIP 150P/02
2200	5322 122 31647	1nF 10% 63V
2201	4822 122 32927	220nF +80-20% 50V
2205	4822 125 60102	30 pF VARIABLE
2209	5322 122 32481	15pF 5% 50V
2210	5322 122 32268	CHIP 470P/02
2211	5322 122 32448	CHIP 10P/02
2215	5322 122 32967	CHIP 5P6/02
2216	5322 122 32967	CHIP 5P6/02
2250	4822 124 40242	1µF 20% 63V
2251	4822 124 40242	1µF 20% 63V
2254	4822 122 10172	220pF 10% 50V
2255	4822 122 10172	220pF 10% 50V
2256	4822 122 31435	470pF 10% 50V
2257	4822 122 31435	470pF 10% 50V
2258	4822 124 40196	220µF 20% 16V
2259	4822 124 40196	220µF 20% 16V
2260	4822 124 41643	100µF 20% 16V
2261	4822 124 41643	100µF 20% 16V
2262	4822 122 10183	100pF 5% 50V
2263	4822 122 10183	100pF 5% 50V
2264	4822 122 33452	180pF 10% 500V
2265	4822 122 33452	180pF 10% 500V
2266	4822 122 31693	560pF 10% 50V
2267	4822 122 31693	560pF 10% 50V
2268	4822 122 10173	820pF 10% 50V
2269	4822 122 10173	820pF 10% 50V
2270	5322 124 21189	100µF 20% 40V
2271	5322 124 21189	100µF 20% 40V
2272	4822 122 31435	470pF 10% 50V
2273	4822 122 31435	470pF 10% 50V
2274	4822 126 11308	47pF 5% 500V
2275	4822 126 11308	47pF 5% 500V
2276	4822 124 41584	100µF 20% 10V
2277	4822 124 41584	100µF 20% 10V
2278	4822 124 41596	22µF 20% 50V
2279	4822 124 41596	22µF 20% 50V
2280	4822 122 10183	100pF 5% 50V
2281	4822 122 10183	100pF 5% 50V
2284	4822 121 43526	47nF 5% 100V
2285	4822 121 43526	47nF 5% 100V
2286	4822 126 11311	4,7nF 50V
2287	4822 126 11311	4,7nF 50V
2288	4822 126 11311	4,7nF 50V
2289	4822 126 11311	4,7nF 50V
2292	5322 121 42489	33nF 5% 250V
2293	4822 124 40248	10µF 20% 63V

2296	4822 124 40749	3,3µF 20% 63V
2303	4822 121 43875	47nF 5% 250V
2305	4822 124 41993	2200µF 20% 35V
2306	4822 124 41993	2200µF 20% 35V
2307	4822 121 43875	47nF 5% 250V
2309	4822 121 43875	47nF 5% 250V
2310	4822 121 42007	100nF 10% 100V
2311	4822 121 42007	100nF 10% 100V
2312	4822 121 42007	100nF 10% 100V
2313	4822 121 43526	47nF 5% 100V
2314	4822 121 43526	47nF 5% 100V
2315	4822 121 43526	47nF 5% 100V
2316	4822 124 80327	680µF 20% 50V
2317	5322 124 21189	100µF 20% 40V
2318	4822 124 41643	100µF 20% 16V
2319	4822 122 10158	1nF 10% 50V
2321	4822 122 10166	22nF 30% 16V
2322	4822 124 40433	47µF 20% 25V
2323	4822 124 40242	1µF 20% 63V
2324	4822 124 40242	1µF 20% 63V
2326	4822 124 42128	4700µF 20% 63V
2327	4822 124 42128	4700µF 20% 63V
2328	4822 122 10158	1nF 10% 50V
2329	4822 122 10158	1nF 10% 50V
2330	4822 124 42125	1000µF 20% 50V
2331	4822 124 40433	47µF 20% 25V
2333	4822 122 10158	1nF 10% 50V
2401	5322 124 41431	22µF 20% 35V
2402	4822 122 10177	10nF 20% 25V
2403	4822 121 42408	220nF 5% 63V
2410	4822 122 10166	22nF 30% 16V
2412	4822 122 10166	22nF 30% 16V
2413	4822 122 31435	470pF 10% 50V
2414	4822 122 31435	470pF 10% 50V
2424	4822 124 40184	1000µF 20% 10V
2425	4822 124 40248	10µF 20% 63V
2426	4822 121 42408	220nF 5% 63V
2427	4822 122 10177	10nF 20% 25V
2428	4822 122 10166	22nF 30% 16V
2429	4822 124 40244	2,2µF 20% 63V
2430	4822 122 10166	22nF 30% 16V
2431	4822 121 51252	470nF 5% 63V
2434	4822 121 51252	470nF 5% 63V
2435	4822 121 51252	470nF 5% 63V
2439	5322 121 42386	100nF 5% 63V
2441	4822 122 10166	22nF 30% 16V
2451	4822 122 90099	CAPNETWORK 8X100pF
2452	4822 122 10183	100pF 5% 50V
2456	4822 122 31435	470pF 10% 50V
2457	4822 122 31435	470pF 10% 50V
2458	4822 122 31435	470pF 10% 50V
2459	4822 122 31435	470pF 10% 50V
2461	4822 122 10166	22nF 30% 16V
2462	4822 122 31435	470pF 10% 50V
2481	4822 122 10166	22nF 30% 16V
2491	4822 122 31385	22pF 50V
2492	4822 122 31385	22pF 50V
2501	4822 121 43187	27nF 5% 250V
2502	4822 121 43187	27nF 5% 250V
2503	4822 122 10185	1,2nF 10% 50V
2504	4822 122 10185	1,2nF 10% 50V
2505	4822 124 40242	1µF 20% 63V
2506	4822 124 40242	1µF 20% 63V
2507	4822 124 40248	10µF 20% 63V
2508	4822 124 40248	10µF 20% 63V
2509	4822 126 11592	1nF 10% 50V
2510	4822 126 11592	1nF 10% 50V
2511	4822 122 33997	56pF 5%NPO
2512	4822 122 33997	56pF 5%NPO
2515	4822 122 10166	22nF 30% 16V
2516	4822 122 10166	22nF 30% 16V
2517	4822 124 41506	47µF 20% 16V
2518	4822 124 41506	47µF 20% 16V
2519	4822 121 51356	180nF 10% 63V
2520	4822 121 51356	180nF 10% 63V
2521	4822 124 40177	47µF 20% 10V
2547	4822 122 10158	1nF 10% 50V
2548	4822 124 41525	100µF 20% 25V
2549	4822 124 42057	3300µF 20% 25V
2551	4822 122 10183	100pF 5% 50V
2552	4822 122 10183	100pF 5% 50V
2553	4822 122 10183	100pF 5% 50V
2554	4822 122 10183	100pF 5% 50V
2555	4822 122 10158	1nF 10% 50V
2556	4822 122 10158	1nF 10% 50V
2557	4822 124 40242	1µF 20% 63V
2558	4822 124 40242	1µF 20% 63V
2559	4822 124 40248	10µF 20% 63V
2560	4822 124 40248	10µF 20% 63V
2561	4822 124 40248	10µF 20% 63V
2562	4822 124 40248	10µF 20% 63V
2563	4822 122 10177	10nF 20% 25V
2564	4822 122 10177	10nF 20% 25V
2565	4822 126 11309	2,7nF 10%Y5F 50V
2566	4822 126 11309	2,7nF 10%Y5F 50V
2567	4822 122 10166	22nF 30% 16V
2568	4822 122 10166	22nF 30% 16V
2569	4822 124 41506	47µF 20% 16V
2570	4822 124 41506	47µF 20% 16V
2571	4822 124 41506	47µF 20% 16V
2572	4822 124 41506	47µF 20% 16V
2573	4822 122 10166	22nF 30% 16V
2574	4822 122 10166	22nF 30% 16V
2575	4822 124 40242	1µF 20% 63V
2576	4822 124 40242	1µF 20% 63V
2577	4822 124 40248	10µF 20% 63V
2578	4822 124 40248	10µF 20% 63V

2579	4822 122 10215	27pF 5% 50V
2580	4822 122 10215	27pF 5% 50V
2581	4822 122 10158	1nF 10% 50V
2582	4822 122 10158	1nF 10% 50V
2583	4822 122 10166	22nF 30% 16V
2584	4822 122 10166	22nF 30% 16V
2585	4822 124 41506	47µF 20% 16V
2586	4822 124 41506	47µF 20% 16V
2587	4822 126 10003	33nF 30% 50V
2588	4822 122 10166	22nF 30% 16V
2589	4822 124 40242	1µF 20% 63V
2590	4822 124 40242	1µF 20% 63V
2591	4822 124 40248	10µF 20% 63V
2592	4822 124 40248	10µF 20% 63V
2593	4822 124 41506	47µF 20% 16V
2594	4822 124 41506	47µF 20% 16V
2595	4822 122 10166	22nF 30% 16V
2596	4822 122 10166	22nF 30% 16V
2597	4822 122 10158	1nF 10% 50V
2598	4822 122 10158	1nF 10% 50V
2599	4822 122 10183	100pF 5% 50V
2600	4822 122 10183	100pF 5% 50V
2601	4822 122 10166	22nF 30% 16V
2602	4822 122 10166	22nF 30% 16V
2603	4822 122 10166	22nF 30% 16V
2604	4822 122 10166	22nF 30% 16V
2605	4822 122 10176	4,7nF 10% 50V
2606	4822 122 10176	4,7nF 10% 50V
2607	4822 124 40242	1µF 20% 63V
2608	4822 124 40177	47µF 20% 10V
2611	4822 122 31435	470pF 10% 50V
2612	4822 122 31435	470pF 10% 50V
2613	4822 122 10176	4,7nF 10% 50V
2614	4822 126 11592	1nF 10% 50V
2615	4822 126 11592	1nF 10% 50V
2616	4822 122 10158	1nF 10% 50V

RESISTORS

3101	4822 051 20473	CHIP 47k/02
3102	4822 051 20333	CHIP 33k/02
3103	4822 051 10472	CHIP 4k7/02
3104	4822 051 10102	CHIP 1k /02
3105	4822 050 23901	390Ω 1% 0,6W
3106	4822 116 52224	470Ω /02
3107	4822 050 24702	4k7 1% 0,6W
3108	4822 050 21202	1k2 1% 0,6W
3109	4822 050 21001	100Ω /02
3110	4822 050 21001	100Ω 1% 0,6W
3111	4822 050 24703	47k 1% 0,6W
3112	4822 051 20562	5k6 5% 0,1W
3112	4822 051 20008	JUMPER 0Ω /02
3113	4822 051 20689	68Ω 5% 0,1W
3114	4822 100 20166	10k 30%LIN 0,1W
3115	4822 051 10479	47Ω 2% 0,25W
3116	4822 050 22201	220Ω 1% 0,6W
3117	4822 051 10103	10k 2% 0,25W
3118	4822 051 20271	270Ω 5% 0,1W
3119	4822 051 20273	27k 5% 0,1W
3120	4822 050 23903	39k 1% 0,6W
3121	4822 051 20104	100k 5% 0,1W
3122	4822 051 10272	2k7 2% 0,25W
3124	4822 051 10008	0Ω 5% 0,25W
3125	4822 050 24702	4k7 1% 0,6W
3126	4822 051 10472	4k7 2% 0,25W
3127	4822 051 20472	4k7 5% 0,1W
3128	4822 050 24702	4k7 1% 0,6W
3129	4822 051 20104	100k 5% 0,1W
3130	4822 051 20104	100k 5% 0,1W
3131	4822 050 23301	330Ω 1% 0,6W
3132	4822 050 26801	680Ω 1% 0,6W
3133	4822 051 20223	22k 5% 0,1W
3134	4822 050 24702	4k7 1% 0,6W
3135	4822 050 22201	220Ω 1% 0,6W
3136	4822 051 10153	15k 2% 0,25W
3137	4822 051 20562	5k6 5% 0,1W
3138	4822 051 20472	4k7 5% 0,1W
3139	4822 050 24702	4k7 1% 0,6W
3140	4822 051 10102	1k 2% 0,25W
3141	4822 050 21003	10k 1% 0,6W
3142	4822 050 22201	220Ω 1% 0,6W
3143	4822 050 22203	22k 1% 0,6W
3144	4822 051 20183	18k 5% 0,1W
3145	4822 100 20166	10k 30%LIN 0,1W
3146	4822 051 10821	820Ω 2% 0,25W
3147	4822 050 22201	220Ω 1% 0,6W
3148	4822 050 21003	10k 1% 0,6W
3149	4822 050 21002	1k 1% 0,6W
3150	4822 050 21002	1k 1% 0,6W
3151	4822 050 21002	1k 1% 0,6W
3153	4822 050 21002	1k 1% 0,6W
3155	4822 051 20332	3k3 5% 0,1W
3156	4822 051 10103	10k 2% 0,25W
3157	4822 051 10008	0Ω 5% 0,25W
3158	4822 051 20104	100k 5% 0,1W
3160	4822 051 10008	0Ω 5% 0,25W
3161	4822 051 20473	CHIP 47k /02
3162	4822 051 20479	47Ω 5% 0,1W
3163	4822 051 20562	CHIP 5k6 /02
3164	4822 051 20008	JUMPER 0Ω/02
3165	4822 051 20473	47k 5% 0,1W
3170	4822 051 10008	JUMPER 0Ω/02
3171	4822 050 26801	680Ω 1% 0,6W
3172	4822 051 20223	22k 5% 0,1W
3173	4822 050 21002	1k /02
3174	4822 051 10102	1k 2% 0,25W

3175	4822 051 10331	330Ω 2% 0,25W
3176	4822 051 20271	270Ω 5% 0,1W
3177	4822 051 10151	150Ω 2% 0,25W
3178	4822 051 20223	22k 5% 0,1W
3179	4822 051 10472	4k7 2% 0,25W
3250	4822 050 22202	2k2 1% 0,6W
3251	4822 050 22202	2k2 1% 0,6W
3252	4822 050 24702	4k7 1% 0,6W
3253	4822 050 24702	4k7 1% 0,6W
3254	4822 050 22202	2k2 1% 0,6W
3255	4822 050 22202	2k2 1% 0,6W
3256	4822 050 24702	4k7 1% 0,6W
3257	4822 050 24702	4k7 1% 0,6W
3258	4822 050 22203	22k 1% 0,6W
3259	4822 050 22203	22k 1% 0,6W
3260	4822 050 22203	22k 1% 0,6W
3261	4822 050 21003	10k 1% 0,6W
3264	4822 050 21002	1k 1% 0,6W
3265	4822 050 21002	1k 1% 0,6W
3266	4822 050 22201	220Ω 1% 0,6W
3267	4822 050 22201	220Ω 1% 0,6W
3268	4822 050 22203	22k 1% 0,6W
3269	4822 050 22203	22k 1% 0,6W
3270	4822 053 10122	1k2 5% 1W
3271	4822 053 10122	1k2 5% 1W
3272	4822 052 10681	680Ω 5% 0,33W
3273	4822 052 10681	680Ω 5% 0,33W
3274	4822 050 22202	2k2 1% 0,6W
3275	4822 050 22202	2k2 1% 0,6W
3276	4822 050 16809	68Ω 1% 0,4W
3277	4822 050 16809	68Ω 1% 0,4W
3278	4822 112 41112	1k5 5% 5,8W
3279	4822 112 41112	1k5 5% 5,8W
3280	4822 053 10152	1k5 5% 1W
3281	4822 053 10152	1k5 5% 1W
3282	4822 050 22202	2k2 1% 0,6W
3283	4822 050 22202	2k2 1% 0,6W
3284	4822 101 10927	470Ω
3285	4822 101 10927	470Ω
3286	4822 050 28201	820Ω 1% 0,6W
3287	4822 050 28201	820Ω 1% 0,6W
3288	4822 050 23002	3k 1% 0,6W
3289	4822 050 23002	3k 1% 0,6W
3290	4822 053 10222	2k2 5% 1W
3291	4822 053 10222	2k2 5% 1W
3292	4822 050 21001	100Ω 1% 0,6W
3293	4822 050 21001	100Ω 1% 0,6W
3294	4822 050 23901	390Ω 1% 0,6W
3295	4822 050 23901	390Ω 1% 0,6W
3296	4822 050 23301	330Ω 1% 0,6W
3297	4822 050 23301	330Ω 1% 0,6W
3298	4822 116 52224	470Ω 5% 0,5W
3299	4822 116 52224	470Ω 5% 0,5W
3300	4822 050 21003	10k 1% 0,6W
3301	4822 050 21003	10k 1% 0,6W
3302	4822 116 52224	470Ω 5% 0,5W
3303	4822 116 52224	470Ω 5% 0,5W
3304	4822 113 80525	OR15 10% 3W
3305	4822 113 80525	OR15 10% 3W
3306	4822 113 80525	OR15 10% 3W
3307	4822 113 80525	OR15 10% 3W
3308	4822 050 24703	47k 1% 0,6W
3309	4822 050 24703	47k 1% 0,6W
3310	4822 050 28203	82k 1% 0,6W
3311	4822 050 22203	22k 1% 0,6W
3312	4822 050 24703	47k 1% 0,6W
3313	4822 050 22203	22k 1% 0,6W
3314	4822 050 26803	68k 1% 0,6W
3315	4822 050 21501	150Ω 1% 0,6W
3316	4822 050 24702	4k7 1% 0,6W
3318	4822 050 21002	1k 1% 0,6W
3319	4822 050 21002	1k 1% 0,6W
3328	4822 116 52224	470Ω 5% 0,5W
3329	4822 116 52224	470Ω 5% 0,5W
3330	4822 050 21003	10k 1% 0,6W
3331	4822 050 21003	10k 1% 0,6W
3332	4822 050 23302	3k3 1% 0,6W
3333	4822 052 10109	10Ω 5% 0,33W
3334	4822 050 22702	2k7 1% 0,6W
3335	4822 052 10229	22Ω 5% 0,33W
3336	4822 050 21002	1k 1% 0,6W
3337	4822 053 10109	10Ω 5% 1W
3338	4822 053 10109	10Ω 5% 1W
3339	4822 052 10108	1Ω 5% 0,33W
3340	4822 050 22204	220k 1% 0,6W
3341	4822 050 22204	220k 1% 0,6W
3342	4822 052 10109	10Ω 5% 0,33W
3343	4822 052 10479	47Ω 5% 0,33W
3344	4822 050 21802	1k8 1% 0,6W
3345	4822 050 21202	1k2 1% 0,6W
3352	4822 050 21002	1k 1% 0,6W
3353	4822 050 21002	1k 1% 0,6W
3354	4822 116 52224	470Ω 5% 0,5W
3355	4822 116 52224	470Ω 5% 0,5W
3356	4822 050 21001	100Ω 1% 0,6W
3357	4822 050 21001	100Ω 1% 0,6W
3358	4822 052 10478	4Ω7 5% 0,33W
3359	4822 052 10478	4Ω7 5% 0,33W
3364	4822 050 22204	220k 1% 0,6W
3365	4822 050 22204	220k 1% 0,6W
3368	4822 052 10109	10Ω 5% 0,33W
3369	4822 052 10109	10Ω 5% 0,33W
3370	4822 050 22203	22k 1% 0,6W
3371	4822 050 22203	22k 1% 0,6W
3379	4822 050 22203	22k 1% 0,6W
3380	4822 052 10109	10Ω 5% 0,33W

3381	4822 052 10109	10Ω 5% 0,33W
3383	4822 050 28201	820Ω 1% 0,6W
3384	4822 050 21003	10k 1% 0,6W
3385	4822 050 21001	100Ω 1% 0,6W
3386	4822 116 52263	2k7 5% 0,5W
3401	4822 052 10228	2Ω2 5% 0,33W
3402	4822 053 10159	15Ω 5% 1W
3403	4822 050 22202	2k2 1% 0,6W
3404	4822 050 24703	47k 1% 0,6W
3405	4822 050 21003	10k 1% 0,6W
3410	4822 052 10478	4Ω7 5% 0,33W
3412	4822 052 10478	4Ω7 5% 0,33W
3416	4822 050 22201	220Ω 1% 0,6W
3417	4822 050 22201	220Ω 1% 0,6W
3418	4822 050 21002	1k 1% 0,6W
3419	4822 050 21002	1k 1% 0,6W
3420	4822 050 21002	1k 1% 0,6W
3421	4822 050 21002	1k 1% 0,6W
3424	4822 052 10109	10Ω 5% 0,33W
3425	4822 050 22202	2k2 1% 0,6W
3426	4822 050 22201	220Ω 1% 0,6W
3427	4822 050 21003	10k 1% 0,6W
3428	4822 116 52234	100k 5% 0,5W
3429	4822 050 25603	56k 1% 0,6W
3430	4822 050 24702	4k7 1% 0,6W
3431	4822 050 22202	2k2 1% 0,6W
3432	4822 050 21003	10k 1% 0,6W
3434	4822 052 10478	4Ω7 5% 0,33W
3435	4822 052 10478	4Ω7 5% 0,33W
3436	4822 050 24702	4k7 1% 0,6W
3437	4822 050 24703	47k 1% 0,6W
3440	4822 050 24703	47k 1% 0,6W
3441	4822 050 24703	47k 1% 0,6W
3442	4822 050 24702	4k7 1% 0,6W
3443	4822 050 24703	47k 1% 0,6W
3444	4822 050 21803	18k 1% 0,6W
3445	4822 050 21003	10k 1% 0,6W
3446	4822 050 21003	10k 1% 0,6W
3447	4822 050 23301	330Ω 1% 0,6W
3451	4822 050 24703	47k 1% 0,6W
3452	4822 050 24703	47k 1% 0,6W
3453	4822 050 24702	4k7 1% 0,6W
3454	4822 050 24703	47k 1% 0,6W
3455	4822 050 21803	18k 1% 0,6W
3461	4822 050 24702	4k7 1% 0,6W
3462	4822 050 24702	4k7 1% 0,6W
3463	4822 050 24702	4k7 1% 0,6W
3464	4822 050 24702	4k7 1% 0,6W
3465	4822 050 24702	4k7 1% 0,6W
3466	4822 050 24702	4k7 1% 0,6W
3467	4822 050 21003	10k 1% 0,6W
3468	4822 050 22704	270k 1% 0,6W
3471	4822 050 21002	1k 1% 0,6W
3472	4822 050 21002	1k 1% 0,6W
3473	4822 050 21002	1k 1% 0,6W
3474	4822 050 21002	1k 1% 0,6W
3475	4822 050 21002	1k 1% 0,6W
3476	4822 050 21002	1k 1% 0,6W
3477	4822 050 21002	1k 1% 0,6W
3478	4822 050 21002	1k 1% 0,6W
3479	4822 116 52234	100k 5% 0,5W
3481	4822 050 24702	4k7 1% 0,6W
3482	4822 050 24702	4k7 1% 0,6W
3483	4822 050 24702	4k7 1% 0,6W
3484	4822 050 24702	4k7 1% 0,6W
3485	4822 050 21002	1k 1% 0,6W
3486	4822 050 21002	1k 1% 0,6W
3487	4822 050 24702	4k7 1% 0,6W
3488	4822 050 24702	4k7 1% 0,6W
3489	4822 050 24702	4k7 1% 0,6W
3490	4822 050 24702	4k7 1% 0,6W
3491	4822 050 21002	1k 1% 0,6W
3492	4822 050 21002	1k 1% 0,6W
3493	4822 050 21002	1k 1% 0,6W
3494	4822 050 21002	1k 1% 0,6W
3496	4822 113 80545	390Ω 10%
3497	4822 050 28209	82Ω 1% 0,6W
3498	4822 113 80545	390Ω 10%
3499	4822 050 28209	82Ω 1% 0,6W
3503	4822 050 21203	12k 1% 0,6W
3504	4822 050 21203	12k 1% 0,6W
3505	4822 050 21203	12k 1% 0,6W
3506	4822 050 21203	12k 1% 0,6W
3507	4822 116 52244	15k 5% 0,5W
3508	4822 116 52244	15k 5% 0,5W
3511	4822 102 10422	50kX2 20% 0,5W
3512	4822 102 10422	50kX2 20% 0,5W
3513	4822 051 10561	560Ω 2% 0,25W
3514	4822 051 10561	560Ω 2% 0,25W
3515	4822 050 25604	560k 1% 0,6W
3516	4822 050 25604	560k 1% 0,6W
3517	4822 116 52224	470Ω 5% 0,5W
3518	4822 116 52224	470Ω 5% 0,5W
3521	4822 050 21001	100Ω 1% 0,6W
3522	4822 050 21001	100Ω 1% 0,6W
3523	4822 052 10479	47Ω 5% 0,33W
3524	4822 052 10479	47Ω 5% 0,33W
3525	4822 102 10413	2X10k 20% 0,05W
3526	4822 102 10414	20kX2 20% 0,05W
3527	4822 050 21502	1k5 1% 0,6W
3528	4822 050 21502	1k5 1% 0,6W
3531	4822 050 21002	1k 1% 0,6W
3532	4822 050 21002	1k 1% 0,6W
3533	4822 116 52234	100k 5% 0,5W
3534	4822 050 21002	1k 1% 0,6W
3535	4822 050 15602	5k6 1% 0,4W
3536	4822 050 21002	1k 1% 0,6W

3537	4822 050 15602	5k6 1% 0,4W
3541	4822 050 24702	4k7 1% 0,6W
3542	4822 050 24702	4k7 1% 0,6W
3543	4822 050 24702	4k7 1% 0,6W
3544	4822 050 24702	4k7 1% 0,6W
3548	4822 052 10479	47Ω 5% 0,33W
3549	4822 050 21002	1k 1% 0,6W
3551	4822 050 23901	390Ω 1% 0,6W
3552	4822 050 23901	390Ω 1% 0,6W
3553	4822 116 52272	330k 5% 0,5W
3554	4822 116 52272	330k 5% 0,5W
3555	4822 050 25603	56k 1% 0,6W
3556	4822 050 25603	56k 1% 0,6W
3557	4822 050 23901	390Ω 1% 0,6W
3558	4822 050 23901	390Ω 1% 0,6W
3559	4822 050 21001	100Ω 1% 0,6W
3560	4822 050 21001	100Ω 1% 0,6W
3561	4822 051 10561	560Ω 2% 0,25W
3562	4822 051 10561	560Ω 2% 0,25W
3563	4822 116 52272	330k 5% 0,5W
3564	4822 116 52272	330k 5% 0,5W
3565	4822 116 52264	27k 5% 0,5W
3566	4822 116 52264	27k 5% 0,5W
3567	4822 116 52303	8k2 5% 0,5W
3568	4822 116 52303	8k2 5% 0,5W
3569	4822 116 52244	15k 5% 0,5W
3570	4822 116 52244	15k 5% 0,5W
3571	4822 050 22201	220Ω 1% 0,6W
3572	4822 050 22201	220Ω 1% 0,6W
3573	4822 116 52264	27k 5% 0,5W
3574	4822 116 52264	27k 5% 0,5W
3575	4822 050 21304	130k 1% 0,6W
3576	4822 050 21304	130k 1% 0,6W
3577	4822 050 23603	36k 1% 0,6W
3578	4822 050 23603	36k 1% 0,6W
3579	4822 050 22203	22k 1% 0,6W
3580	4822 050 22203	22k 1% 0,6W
3581	4822 050 26202	6k2 1% 0,6W
3582	4822 050 26202	6k2 1% 0,6W
3583	4822 050 21101	110Ω 1% 0,6W
3584	4822 050 21101	110Ω 1% 0,6W
3585	4822 050 21803	18k 1% 0,6W
3586	4822 050 21803	18k 1% 0,6W
3587	4822 050 23603	36k 1% 0,6W
3588	4822 050 23603	36k 1% 0,6W
3589	4822 050 22203	22k 1% 0,6W
3590	4822 050 22203	22k 1% 0,6W
3591	4822 050 22203	22k 1% 0,6W
3592	4822 050 22203	22k 1% 0,6W
3593	4822 116 52234	100k 5% 0,5W
3594	4822 116 52234	100k 5% 0,5W
3595	4822 050 26803	68k 1% 0,6W
3596	4822 050 26803	68k 1% 0,6W
3597	4822 051 10561	560Ω 2% 0,25W
3598	4822 051 10561	560Ω 2% 0,25W
3599	4822 116 52234	100k 5% 0,5W
3600	4822 116 52234	100k 5% 0,5W
3601	4822 050 22201	220Ω 1% 0,6W
3602	4822 050 22201	220Ω 1% 0,6W
3605	4822 116 52234	100k 5% 0,5W
3606	4822 116 52234	100k 5% 0,5W
3607	4822 050 21003	10k 1% 0,6W
3608	4822 050 21003	10k 1% 0,6W
3609	4822 116 52224	470Ω 5% 0,5W
3610	4822 116 52224	470Ω 5% 0,5W
3611	4822 050 22201	220Ω 1% 0,6W
3612	4822 050 22201	220Ω 1% 0,6W
3613	4822 050 21002	1k 1% 0,6W
3614	4822 050 21002	1k 1% 0,6W
3615	4822 116 52224	470Ω 5% 0,5W
3616	4822 116 52224	470Ω 5% 0,5W
3617	4822 116 52217	270Ω 5% 0,5W
3618	4822 116 52217	270Ω 5% 0,5W
3619	4822 050 23302	3k3 1% 0,6W
3620	4822 050 28209	82Ω 1% 0,6W
3621	4822 116 52234	100k 5% 0,5W
3622	4822 116 52234	100k 5% 0,5W
3623	4822 050 21003	10k 1% 0,6W
3624	4822 116 52234	100k 5% 0,5W
3825	4822 050 21802	1k8 1% 0,6W
3826	4822 050 21802	1k8 1% 0,6W
3827	4822 116 52234	100k 5% 0,5W
3828	4822 116 52234	100k 5% 0,5W
3829	4822 050 21802	1k8 1% 0,6W
3830	4822 050 21802	1k8 1% 0,6W
3831	4822 051 10561	560Ω 2% 0,25W
3832	4822 051 10561	560Ω 2% 0,25W
3833	4822 116 52234	100k 5% 0,5W
3834	4822 116 52234	100k 5% 0,5W
3839	4822 050 21802	1k8 1% 0,6W
3840	4822 050 21802	1k8 1% 0,6W
3841	4822 050 26801	680R 1% 0,6W
3842	4822 050 26801	680R 1% 0,6W
3843	4822 116 52234	100k 5% 0,5W
3844	4822 116 52234	100k 5% 0,5W
3845	4822 050 22202	2k2 1% 0,6W
3846	4822 050 24702	4k7 1% 0,6W
3847	4822 050 22202	2k2 1% 0,6W
3848	4822 050 24702	4k7 1% 0,6W
3849	4822 050 22202	2k2 1% 0,6W
3850	4822 050 24702	4k7 1% 0,6W
3853	4822 050 21002	1k 1% 0,6W
3854	4822 050 21002	1k 1% 0,6W
3855	4822 050 21006	10M 1% 0,6W
3856	4822 050 24703	47k 1% 0,6W

COILS

5001	4822 146 31172	MAINS TRAFO
5101	4822 156 30947	RF COIL 1,5TURNS
5102	4822 156 30947	RF COIL /02
5103	4822 156 30947	RF COIL 1,5TURNS
5104	4822 157 60284	FM OSC COIL
5104	4822 157 63288	FM OSC COIL /02
5105	4822 157 63031	COIL LW
5106	4822 157 53192	COIL 0,22µH
5107	4822 242 72096	RES 10,7 MHz
5108	4822 157 63029	AM IF COIL
5109	4822 242 71878	RES 450kHz
5110	4822 157 63033	COIL LW
5111	4822 157 63028	IF COIL
5111	4822 157 63163	IF COIL /02
5112	4822 242 72976	QUARTZ 2,7MHz
5113	4822 157 60147	COIL2,2µH
5114	4822 158 60509	ADJUST.COIL/02
5115	4822 157 60147	RF1 COIL /02
5116	4822 157 63032	COIL LW
5118	4822 152 20699	COIL 560µH
5250	4822 280 70366	RELAY
5252	4822 157 62255	COIL 18,5 TURNS
5253	4822 157 62255	COIL 18,5 TURNS
5491	4822 242 81016	X-TAL 32,768kHz
5492	4822 242 73769	CST 4,19MHz
5551	4822 157 53123	COIL 100µH

DIODES

6001	4822 130 82489	GL2PR9 LED
6101	4822 130 81643	CHIP DIODE /02
6102	4822 130 81643	CHIP DIODE /02
6103	5322 130 31684	BB809
6104	4822 130 81673	1SV149(B)
6105	4822 130 81673	1SV149(B)
6106	5322 130 31684	BB809
6107	4822 130 34174	BZX79-C4V7
6110	4822 130 81643	CHIP DIODE /02
6111	4822 130 81643	CHIP DIODE /02
6250	4822 130 61219	BZX79-C10
6251	4822 130 61219	BZX79-C10
6252	4822 130 61219	BZX79-C10
6253	4822 130 61219	BZX79-C10
6256	4822 130 30842	BAV21
6257	4822 130 30842	BAV21
6258	5322 130 34563	BZX79-C2V7
6259	5322 130 34563	BZX79-C2V7
6260	4822 130 80235	BZX79-C3V3
6261	4822 130 80235	BZX79-C3V3
6262	4822 130 30842	BAV21
6263	4822 130 30842	BAV21
6268	4822 130 30621	1N4148
6269	4822 130 30621	1N4148
6270	4822 130 30621	1N4148
6273	4822 130 34167	BZX79-C6V2
6274	4822 130 30621	1N4148
6275	4822 130 30621	1N4148
6277	4822 130 30621	1N4148
6278	5322 130 30684	1N4002GP
6279	5322 130 30684	1N4002GP
6280	5322 130 30684	1N4002GP
6281	5322 130 30684	1N4002GP
6282	4822 130 34281	BZX79-C15
6283	4822 130 82079	D3SBA20
6284	4822 130 82079	D3SBA20
6292	4822 130 30621	1N4148
6293	4822 130 30621	1N4148
6294	4822 130 30621	1N4148
6295	4822 130 30621	1N4148
6296	4822 130 30621	1N4148
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6313	4822 130 34233	BZX79-C5V1
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6335	4822 130 34379	BZX79-C27
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6545	4822 130 34281	BZX79-C15
6547	5322 130 32184	BYV27-50
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TRANSISTORS & IC's

7101	4822 130 60163	TR 2SC1047 /02
7102	4822 130 60093	2SA838B
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7106	4822 209 71321	AN7411
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7274	5322 130 44926	BDT62B
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7281	4822 130 40937	BC548B
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7285	4822 130 41774	BD826
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7289	4822 130 40959	BC547B
7294	4822 130 40824	BD136
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7556	5322 209 10576	HEF4053BD
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